

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

LTE Band 5 HotSpot Body Rear 16QAM 1RB 0 offset 20525/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.216 mW/g

LTE Band 5 HotSpot Body Rear 16QAM 1RB 0 offset 20525/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

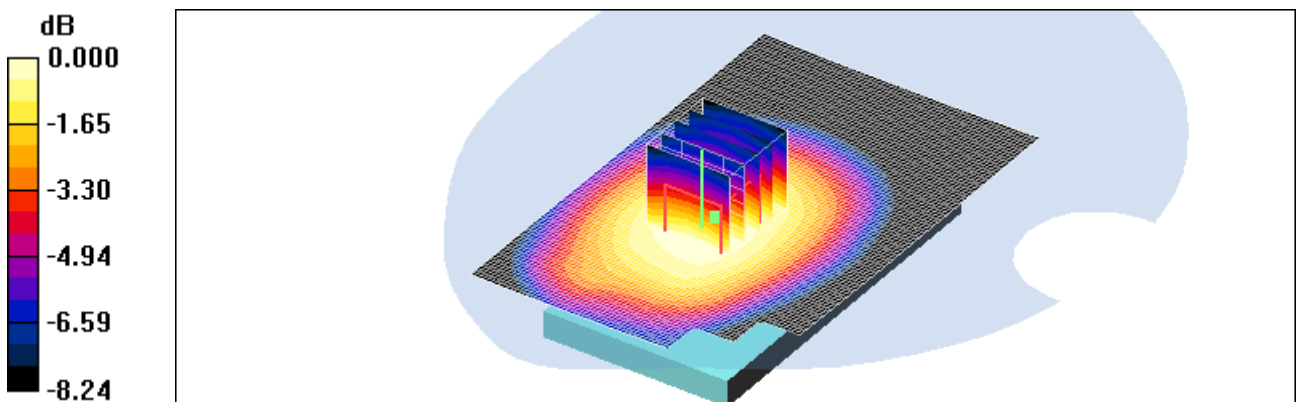
Reference Value = 7.75 V/m; Power Drift = -0.030 dB

Peak SAR (extrapolated) = 0.254 W/kg

SAR(1 g) = 0.209 mW/g; SAR(10 g) = 0.158 mW/g

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.219 mW/g



0 dB = 0.219mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 5; Frequency: 836.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 5 HotSpot Body Rear 16QAM 1RB 49 offset 20525/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.128 mW/g

**LTE Band 5 HotSpot Body Rear 16QAM 1RB 49 offset 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

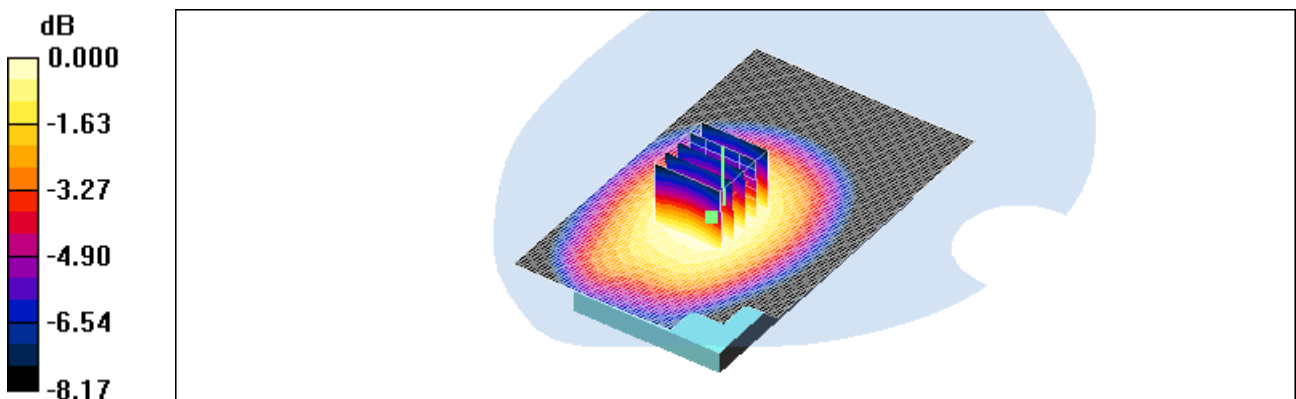
Reference Value = 5.83 V/m; Power Drift = 0.157 dB

Peak SAR (extrapolated) = 0.150 W/kg

**SAR(1 g) = 0.121 mW/g; SAR(10 g) = 0.092 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.128 mW/g



0 dB = 0.128mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

LTE Band 5 HotSpot Body Front 16QAM 25RB 13 offset 20525/Area Scan (71x111x1): Measurement grid:  
dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.129 mW/g

LTE Band 5 HotSpot Body Front 16QAM 25RB 13 offset 20525/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

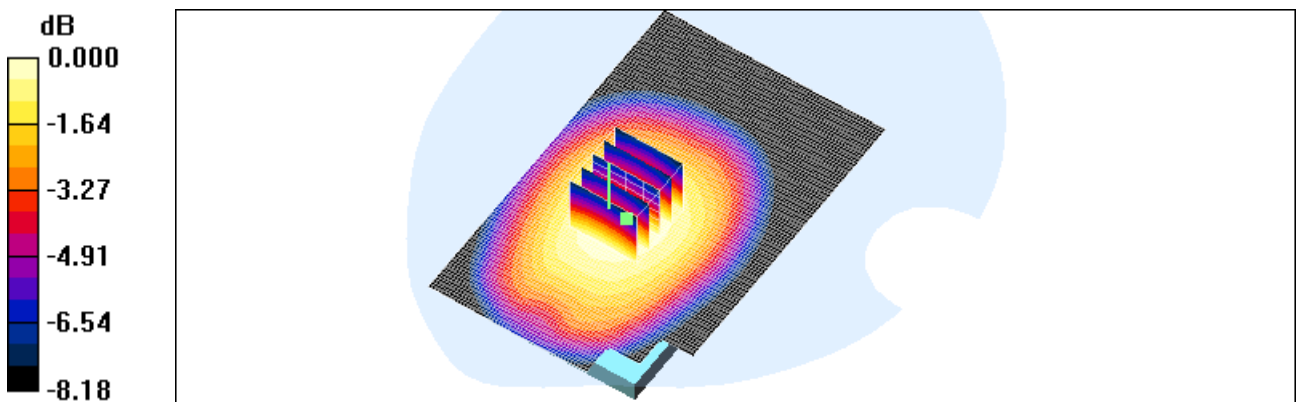
Reference Value = 6.63 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 0.153 W/kg

SAR(1 g) = 0.123 mW/g; SAR(10 g) = 0.094 mW/g

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.131 mW/g



0 dB = 0.131mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance: 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5 \text{ MHz}$ ;  $\sigma = 1.01 \text{ mho/m}$ ;  $\epsilon_r = 54.7$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 5 HotSpot Body Front 16QAM 1RB 0 offset 20525/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.207 mW/g

**LTE Band 5 HotSpot Body Front 16QAM 1RB 0 offset 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

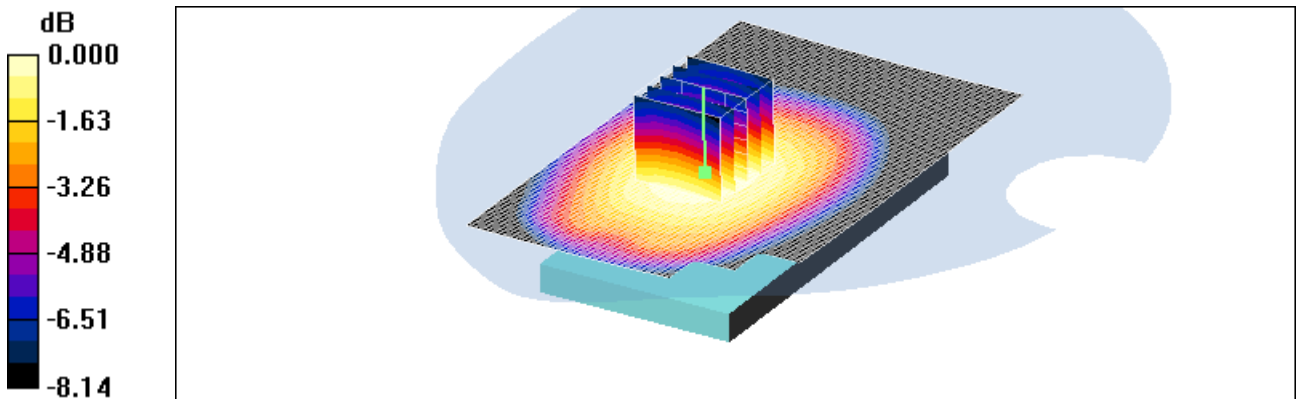
Reference Value = 8.26 V/m; Power Drift = 0.104 dB

Peak SAR (extrapolated) = 0.244 W/kg

**SAR(1 g) = 0.202 mW/g; SAR(10 g) = 0.155 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.212 mW/g



0 dB = 0.212mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

LTE Band 5 HotSpot Body Front 16QAM 1RB 49 offset 20525/Area Scan (71x111x1): Measurement grid:  
dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.135 mW/g

LTE Band 5 HotSpot Body Front 16QAM 1RB 49 offset 20525/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

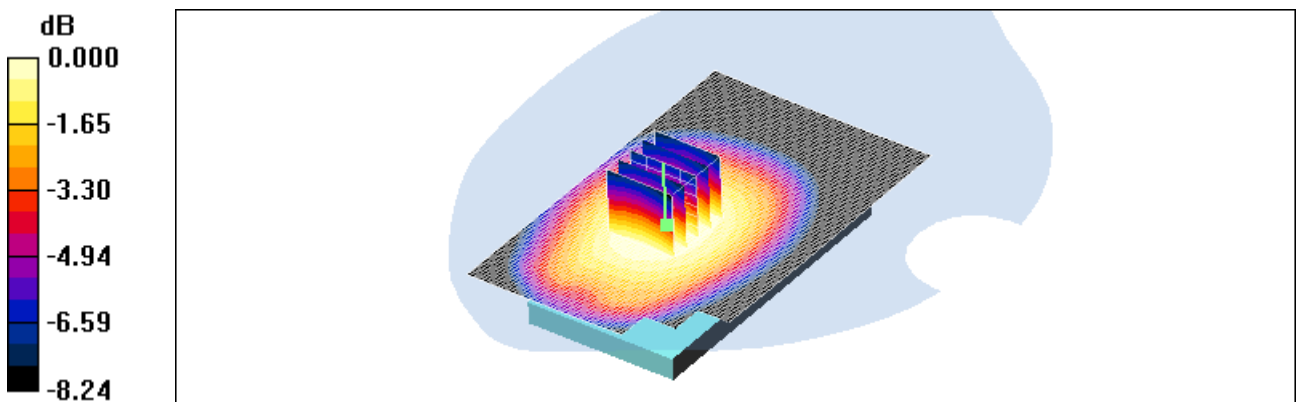
Reference Value = 6.82 V/m; Power Drift = -0.180 dB

Peak SAR (extrapolated) = 0.153 W/kg

SAR(1 g) = 0.128 mW/g; SAR(10 g) = 0.097 mW/g

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.133 mW/g



0 dB = 0.133mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**LTE BAnd 5 Hotspot Body Left side 16QAM 25RB 13offset 20525/Area Scan (51x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.204 mW/g

**LTE BAnd 5 Hotspot Body Left side 16QAM 25RB 13offset 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

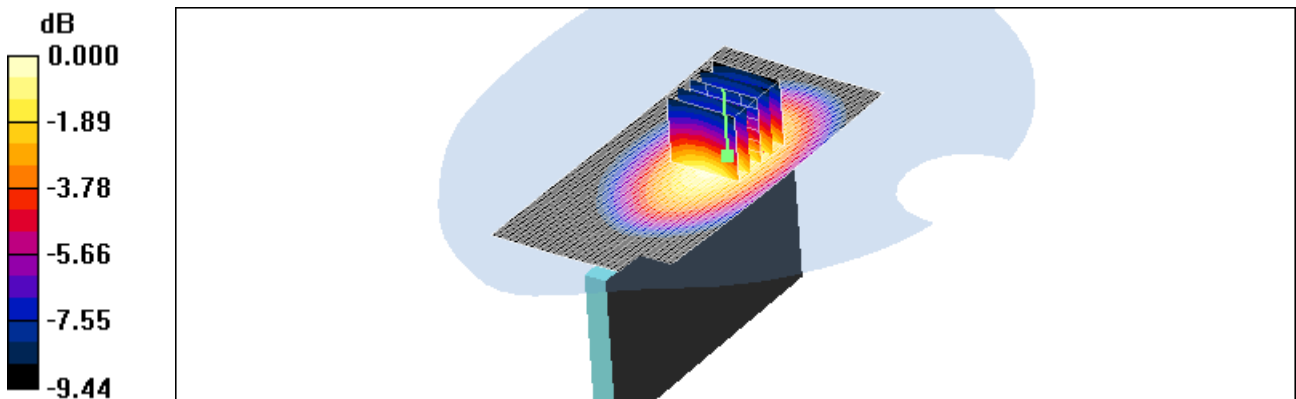
Reference Value = 11.6 V/m; Power Drift = -0.174 dB

Peak SAR (extrapolated) = 0.268 W/kg

**SAR(1 g) = 0.196 mW/g; SAR(10 g) = 0.134 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.213 mW/g



0 dB = 0.213mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**LTE BAnd 5 Hotspot Body Left side16QAM 1RB 0 offset 20525/Area Scan (51x111x1):** Measurement grid:  
dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.284 mW/g

**LTE BAnd 5 Hotspot Body Left side16QAM 1RB 0 offset 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  
dx=8mm, dy=8mm, dz=5mm

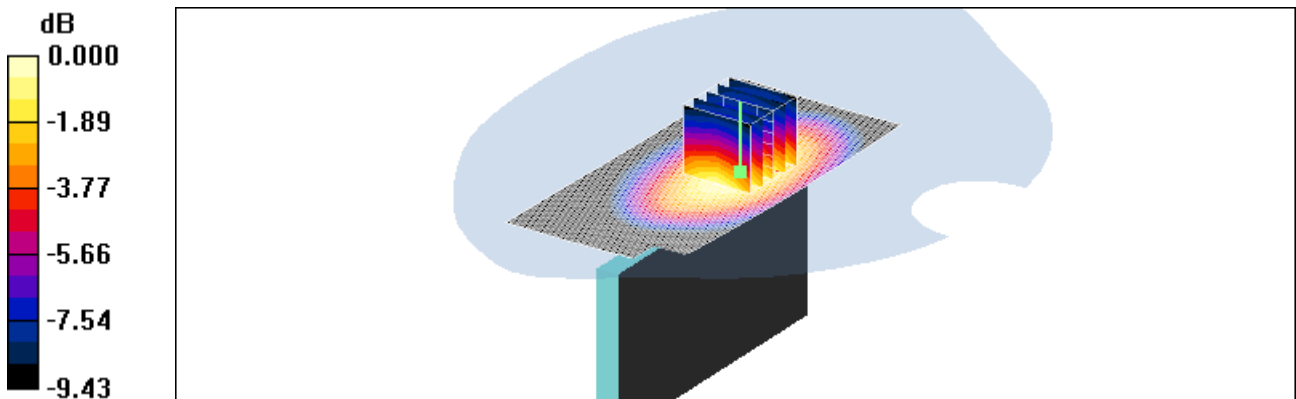
Reference Value = 13.1 V/m; Power Drift = 0.131 dB

Peak SAR (extrapolated) = 0.350 W/kg

**SAR(1 g) = 0.257 mW/g; SAR(10 g) = 0.175 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.283 mW/g



0 dB = 0.283mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**LTE BAnd 5 Hotspot Body Left side 16QAM 1RB 49offset 20525/Area Scan (51x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.231 mW/g

**LTE BAnd 5 Hotspot Body Left side 16QAM 1RB 49offset 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

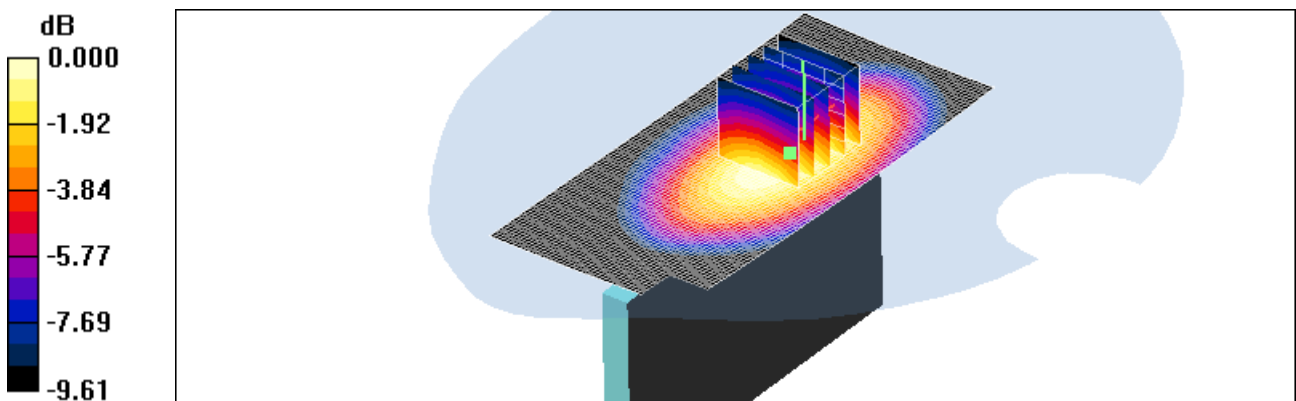
Reference Value = 11.9 V/m; Power Drift = -0.039 dB

Peak SAR (extrapolated) = 0.279 W/kg

**SAR(1 g) = 0.206 mW/g; SAR(10 g) = 0.142 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.225 mW/g



0 dB = 0.225mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**LTE BAnd 5 Hotspot Body Right side 16QAM 25RB 13offset 20525/Area Scan (51x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.182 mW/g

**LTE BAnd 5 Hotspot Body Right side 16QAM 25RB 13offset 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

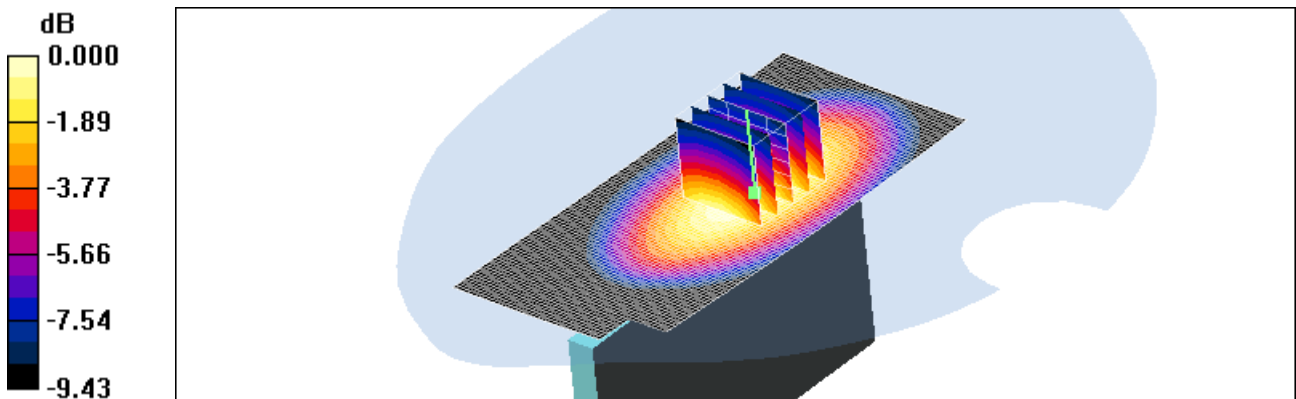
Reference Value = 11.2 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.220 W/kg

**SAR(1 g) = 0.164 mW/g; SAR(10 g) = 0.113 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.175 mW/g



0 dB = 0.175mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**LTE BAnd 5 Hotspot Body Right side 16QAM 1RB 0 offset 20525/Area Scan (51x111x1):** Measurement grid:  
dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.228 mW/g

**LTE BAnd 5 Hotspot Body Right side 16QAM 1RB 0 offset 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  
dx=8mm, dy=8mm, dz=5mm

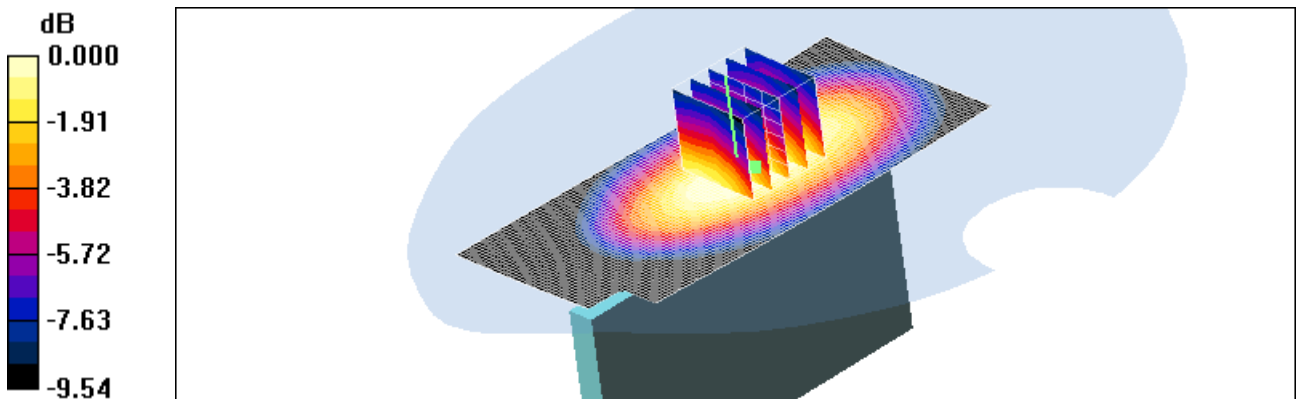
Reference Value = 13.5 V/m; Power Drift = -0.003 dB

Peak SAR (extrapolated) = 0.242 W/kg

**SAR(1 g) = 0.189 mW/g; SAR(10 g) = 0.135 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.199 mW/g



0 dB = 0.199mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**LTE BAnd 5 Hotspot Body Right side 16QAM 1RB 49offset 20525/Area Scan (51x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.157 mW/g

**LTE BAnd 5 Hotspot Body Right side 16QAM 1RB 49offset 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

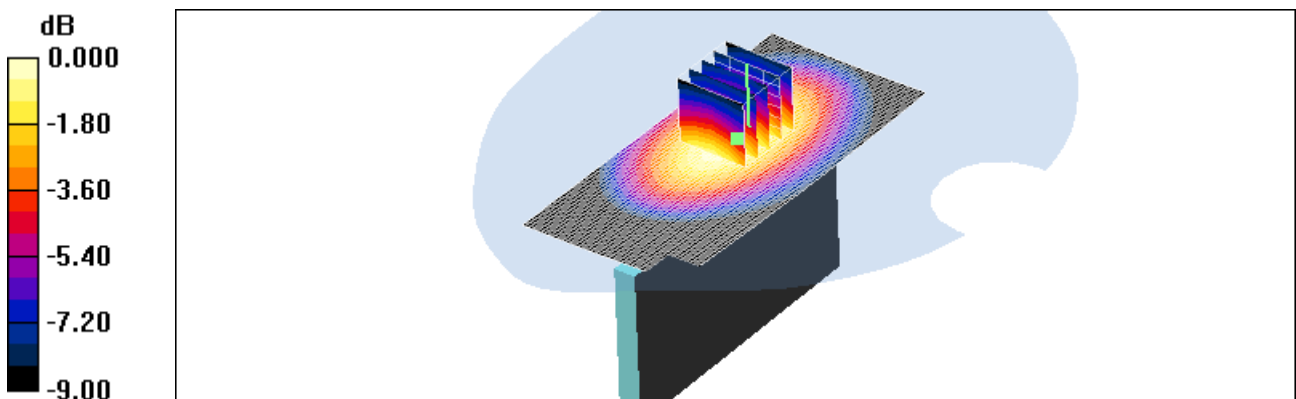
Reference Value = 11.2 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 0.198 W/kg

**SAR(1 g) = 0.148 mW/g; SAR(10 g) = 0.105 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.159 mW/g



0 dB = 0.159mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**LTE Band 5 Hotspot Body bottom 16QAM 25RB 13offset 20525/Area Scan (41x71x1):** Measurement grid:  
dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.036 mW/g

**LTE Band 5 Hotspot Body bottom 16QAM 25RB 13offset 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  
dx=8mm, dy=8mm, dz=5mm

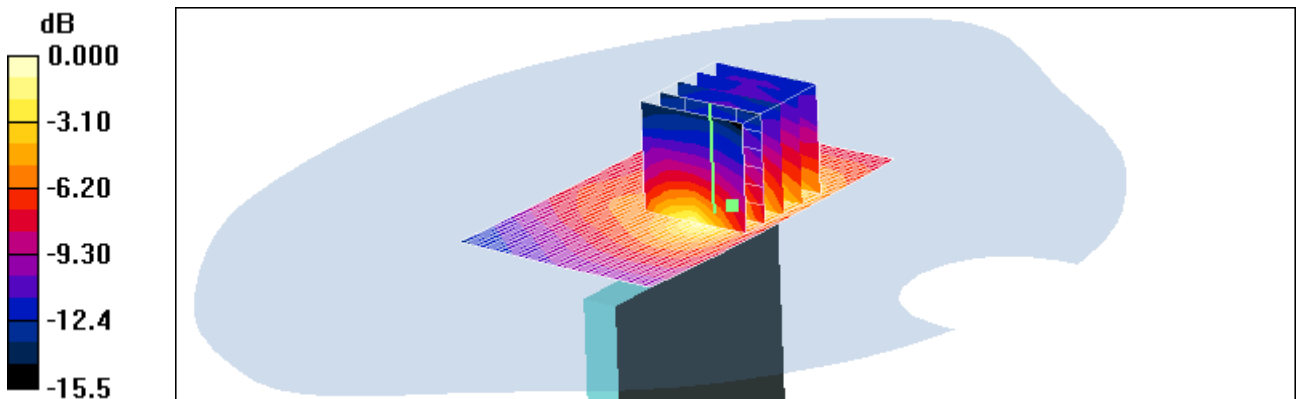
Reference Value = 3.77 V/m; Power Drift = 0.055 dB

Peak SAR (extrapolated) = 0.074 W/kg

**SAR(1 g) = 0.036 mW/g; SAR(10 g) = 0.018 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.040 mW/g



0 dB = 0.040mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
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Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**LTE Band 5 Hotspot Body bottom 16QAM 1RB 0offset 20525/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.031 mW/g

**LTE Band 5 Hotspot Body bottom 16QAM 1RB 0offset 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

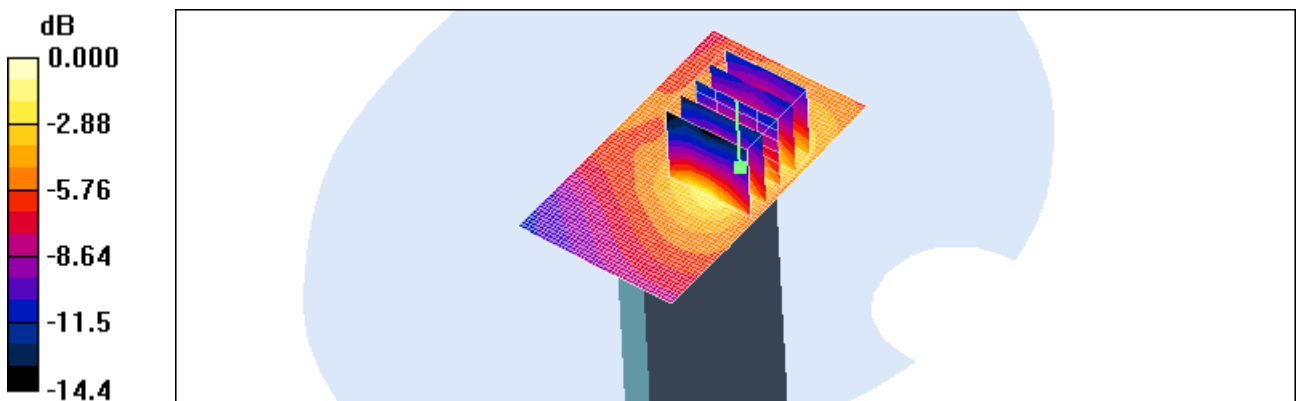
Reference Value = 4.13 V/m; Power Drift = -0.142 dB

Peak SAR (extrapolated) = 0.064 W/kg

**SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.017 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.034 mW/g



0 dB = 0.034mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**LTE Band 5 Hotspot Body bottom 16QAM 1RB 49offset 20525/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.038 mW/g

**LTE Band 5 Hotspot Body bottom 16QAM 1RB 49offset 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

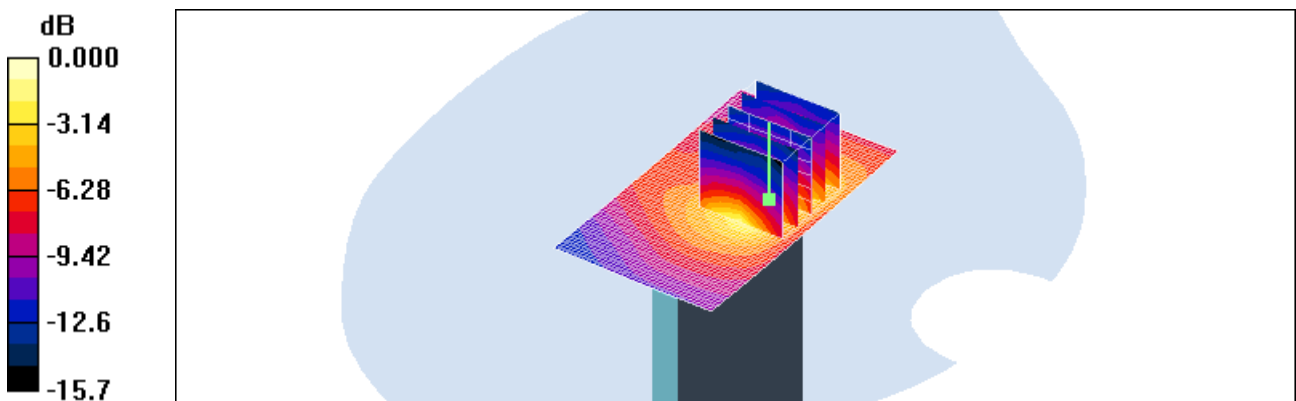
Reference Value = 4.74 V/m; Power Drift = 0.060 dB

Peak SAR (extrapolated) = 0.087 W/kg

**SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.021 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.046 mW/g



0 dB = 0.046mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 HotSpot Rear QPSK 25RB 13offset 20175/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.391 mW/g

**LTE Band 4 HotSpot Rear QPSK 25RB 13offset 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

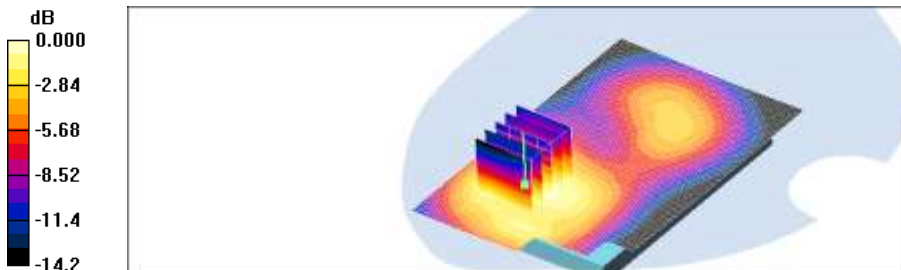
Reference Value = 12.2 V/m; Power Drift = 0.092 dB

Peak SAR (extrapolated) = 0.484 W/kg

**SAR(1 g) = 0.368 mW/g; SAR(10 g) = 0.241 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.398 mW/g



0 dB = 0.398mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 HotSpot Rear QPSK 1RB 0offset 20175/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.530 mW/g

**LTE Band 4 HotSpot Rear QPSK 1RB 0offset 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

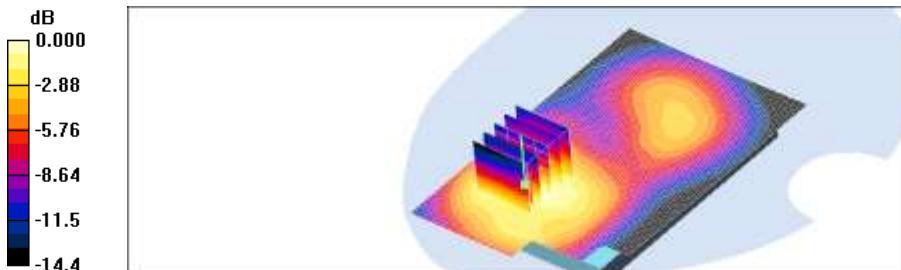
Reference Value = 13.3 V/m; Power Drift = 0.088 dB

Peak SAR (extrapolated) = 0.648 W/kg

**SAR(1 g) = 0.493 mW/g; SAR(10 g) = 0.320 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.541 mW/g



0 dB = 0.541mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 HotSpot Rear QPSK 1RB 49offset 20175/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.504 mW/g

**LTE Band 4 HotSpot Rear QPSK 1RB 49offset 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

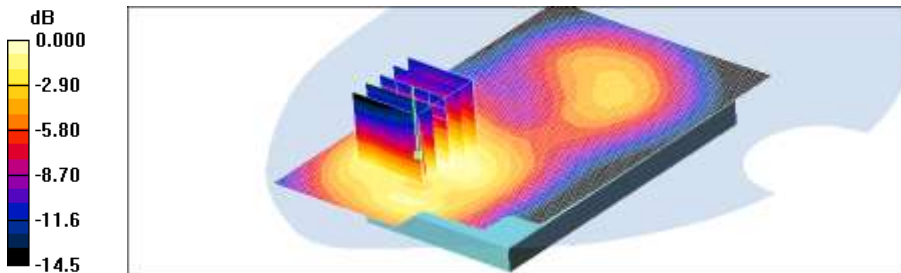
Reference Value = 13.6 V/m; Power Drift = -0.147 dB

Peak SAR (extrapolated) = 0.591 W/kg

**SAR(1 g) = 0.453 mW/g; SAR(10 g) = 0.292 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.503 mW/g



0 dB = 0.503mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 HotSpot Front QPSK 25RB 13offset 20175/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.628 mW/g

**LTE Band 4 HotSpot Front QPSK 25RB 13offset 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.2 V/m; Power Drift = -0.091 dB

Peak SAR (extrapolated) = 0.756 W/kg

**SAR(1 g) = 0.558 mW/g; SAR(10 g) = 0.332 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.641 mW/g

**LTE Band 4 HotSpot Front QPSK 25RB 13offset 20175/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

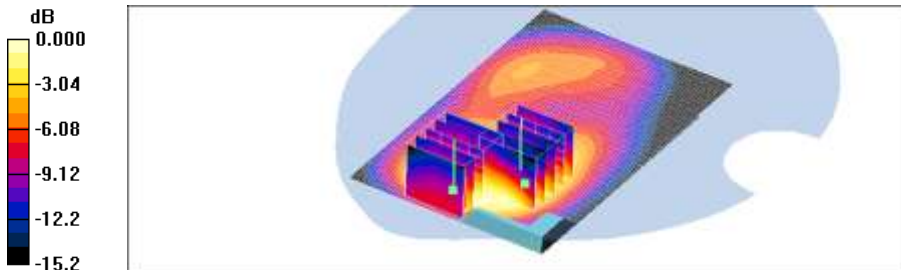
Reference Value = 10.2 V/m; Power Drift = -0.091 dB

Peak SAR (extrapolated) = 0.681 W/kg

**SAR(1 g) = 0.513 mW/g; SAR(10 g) = 0.326 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.546 mW/g



0 dB = 0.546mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with  
Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 HotSpot Front QPSK 1RB Offset 20175/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.746 mW/g

**LTE Band 4 HotSpot Front QPSK 1RB Offset 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.7 V/m; Power Drift = -0.166 dB

Peak SAR (extrapolated) = 0.932 W/kg

**SAR(1 g) = 0.708 mW/g; SAR(10 g) = 0.418 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.819 mW/g

**LTE Band 4 HotSpot Front QPSK 1RB Offset 20175/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

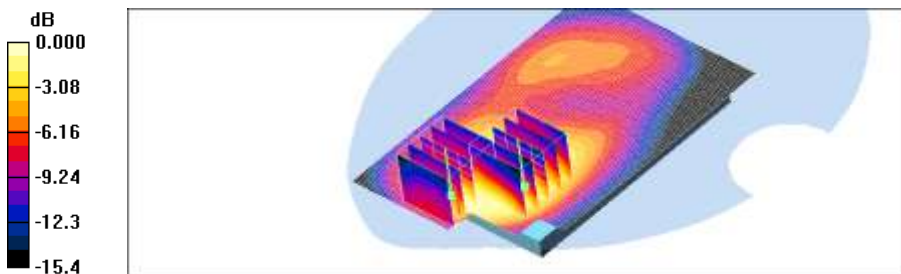
Reference Value = 11.7 V/m; Power Drift = -0.166 dB

Peak SAR (extrapolated) = 0.911 W/kg

**SAR(1 g) = 0.664 mW/g; SAR(10 g) = 0.423 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.720 mW/g



0 dB = 0.720mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 HotSpot Front QPSK 1RB 49offset 20175/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.820 mW/g

**LTE Band 4 HotSpot Front QPSK 1RB 49offset 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.3 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 1.01 W/kg

**SAR(1 g) = 0.752 mW/g; SAR(10 g) = 0.438 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.864 mW/g

**LTE Band 4 HotSpot Front QPSK 1RB 49offset 20175/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

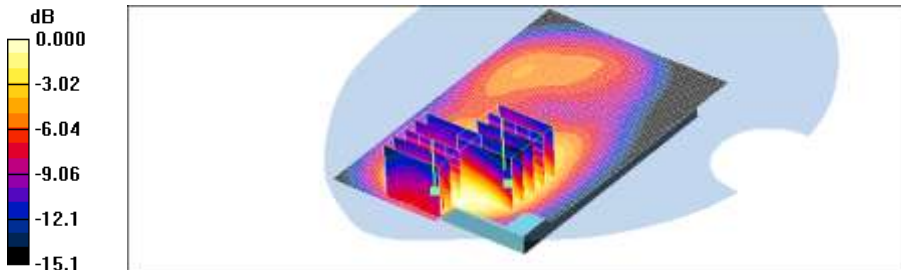
Reference Value = 11.3 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 0.862 W/kg

**SAR(1 g) = 0.640 mW/g; SAR(10 g) = 0.409 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.680 mW/g



0 dB = 0.680mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot Body Left side QPSK 25RB 13offset/Area Scan (41x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.140 mW/g

**LTE Band 4 Hotspot Body Left side QPSK 25RB 13offset/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

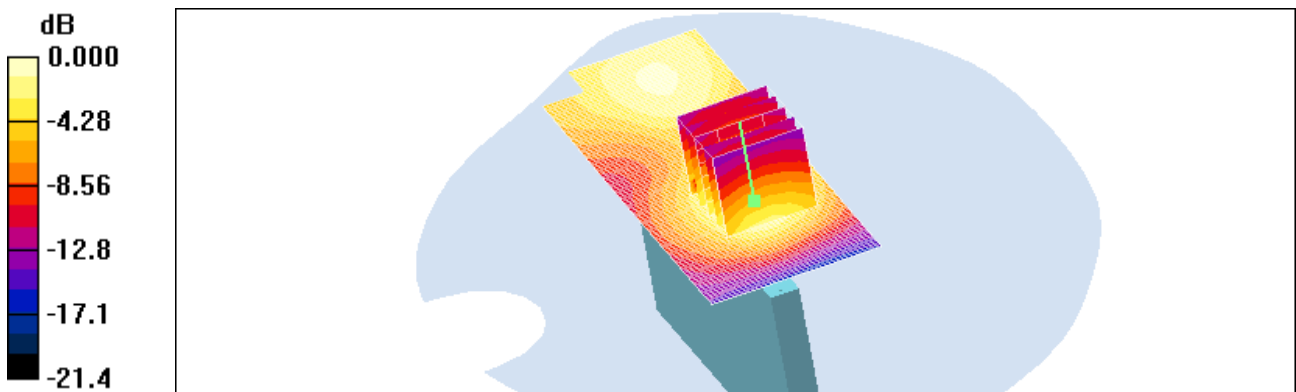
Reference Value = 8.81 V/m; Power Drift = -0.049 dB

Peak SAR (extrapolated) = 0.237 W/kg

**SAR(1 g) = 0.124 mW/g; SAR(10 g) = 0.076 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.134 mW/g



0 dB = 0.134mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot Body Left side QPSK 1RB 0offset/Area Scan (41x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.175 mW/g

**LTE Band 4 Hotspot Body Left side QPSK 1RB 0offset/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

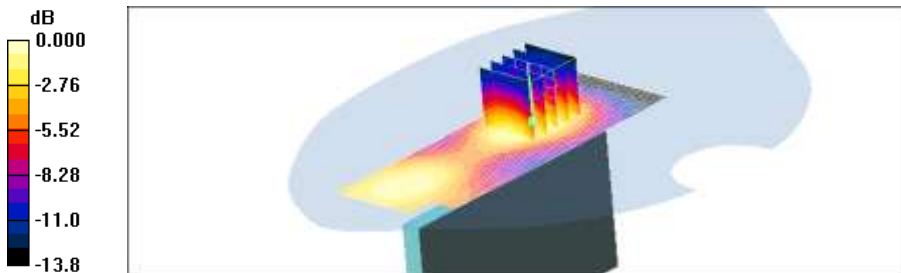
Reference Value = 10.0 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 0.202 W/kg

**SAR(1 g) = 0.150 mW/g; SAR(10 g) = 0.095 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.166 mW/g



0 dB = 0.166mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot Body Left side QPSK 1RB 49offset/Area Scan (41x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.196 mW/g

**LTE Band 4 Hotspot Body Left side QPSK 1RB 49offset/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

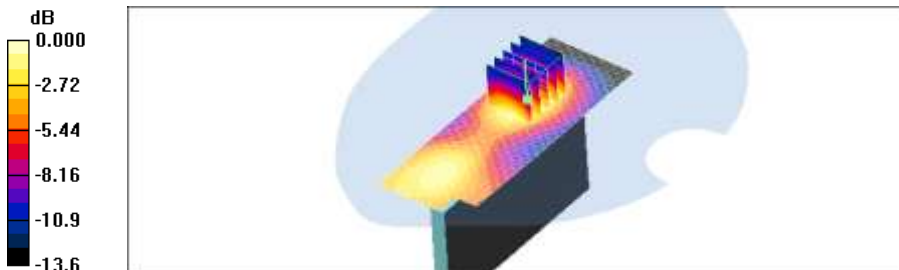
Reference Value = 10.4 V/m; Power Drift = 0.139 dB

Peak SAR (extrapolated) = 0.221 W/kg

**SAR(1 g) = 0.165 mW/g; SAR(10 g) = 0.103 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.182 mW/g



0 dB = 0.182mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot Body Right side QPSK 25RB 13offset/Area Scan (41x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.345 mW/g

**LTE Band 4 Hotspot Body Right side QPSK 25RB 13offset/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:

dx=8mm, dy=8mm, dz=5mm

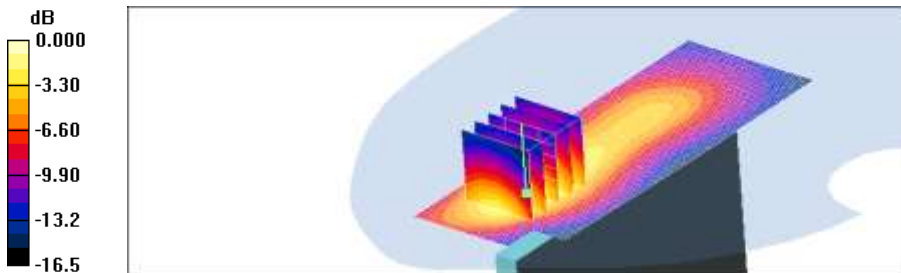
Reference Value = 9.19 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 0.395 W/kg

**SAR(1 g) = 0.286 mW/g; SAR(10 g) = 0.173 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.319 mW/g



0 dB = 0.319mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot Body Right side QPSK 1RB 0 offset/Area Scan (41x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.415 mW/g

**LTE Band 4 Hotspot Body Right side QPSK 1RB 0 offset/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

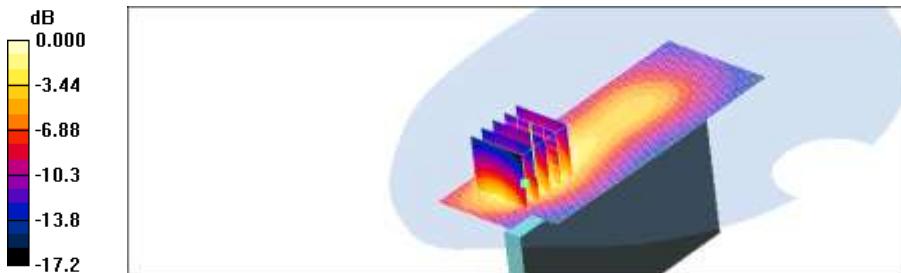
Reference Value = 10.7 V/m; Power Drift = -0.195 dB

Peak SAR (extrapolated) = 0.533 W/kg

**SAR(1 g) = 0.372 mW/g; SAR(10 g) = 0.223 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.415 mW/g



0 dB = 0.415mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot Body Right side QPSK 1RB 49 offset/Area Scan (41x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.433 mW/g

**LTE Band 4 Hotspot Body Right side QPSK 1RB 49 offset/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

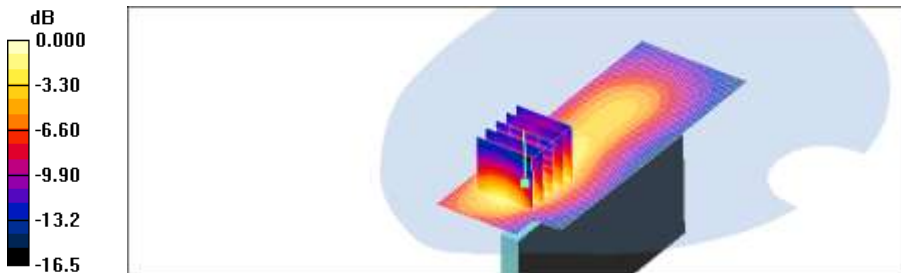
Reference Value = 10.3 V/m; Power Drift = 0.125 dB

Peak SAR (extrapolated) = 0.520 W/kg

**SAR(1 g) = 0.357 mW/g; SAR(10 g) = 0.212 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.390 mW/g



0 dB = 0.390mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot bottom QPSK 25RB 13 Offset 20175ch/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.961 mW/g

**LTE Band 4 Hotspot bottom QPSK 25RB 13 Offset 20175ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:

dx=8mm, dy=8mm, dz=5mm

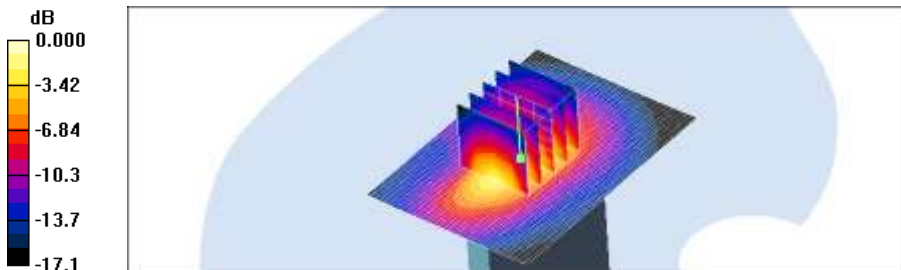
Reference Value = 26.7 V/m; Power Drift = 0.120 dB

Peak SAR (extrapolated) = 1.14 W/kg

**SAR(1 g) = 0.798 mW/g; SAR(10 g) = 0.436 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.911 mW/g



0 dB = 0.911mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot bottom QPSK 1RB 0 Offset 20175ch/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 1.24 mW/g

**LTE Band 4 Hotspot bottom QPSK 1RB 0 Offset 20175ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

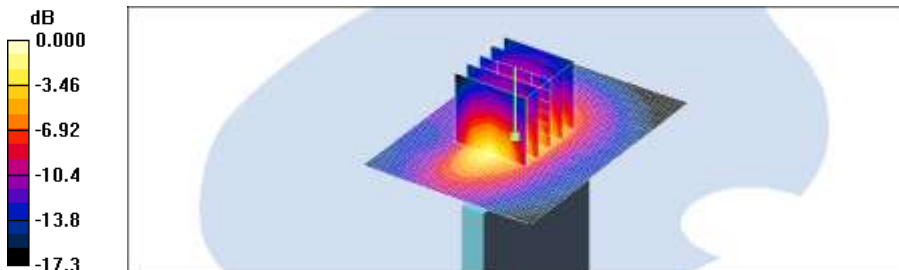
Reference Value = 29.8 V/m; Power Drift = 0.081 dB

Peak SAR (extrapolated) = 1.46 W/kg

**SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.549 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.16 mW/g



0 dB = 1.16mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot bottom QPSK 1RB 49Offset 20175ch/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 1.25 mW/g

**LTE Band 4 Hotspot bottom QPSK 1RB 49Offset 20175ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

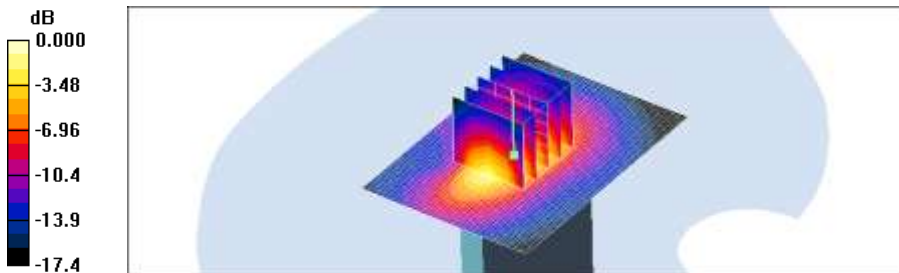
Reference Value = 30.1 V/m; Power Drift = 0.161 dB

Peak SAR (extrapolated) = 1.52 W/kg

**SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.565 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.18 mW/g



0 dB = 1.18mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 HotSpot Rear 16QAM 25RB 13offset 20175/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.322 mW/g

**LTE Band 4 HotSpot Rear 16QAM 25RB 13offset 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

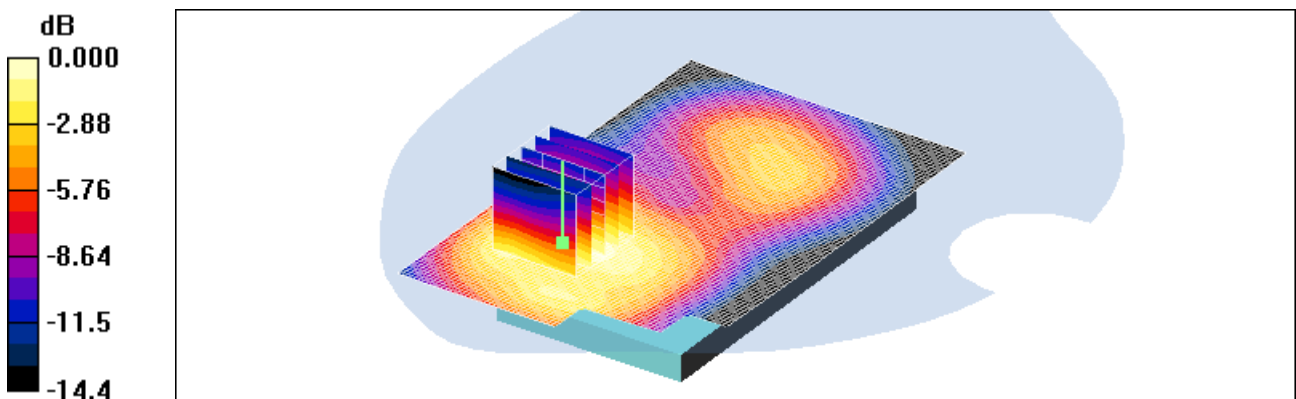
Reference Value = 11.0 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 0.392 W/kg

**SAR(1 g) = 0.290 mW/g; SAR(10 g) = 0.188 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.314 mW/g



0 dB = 0.314mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

LTE Band 4 HotSpot Rear 16QAM 1RB 0offset 20175/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.385 mW/g

LTE Band 4 HotSpot Rear 16QAM 1RB 0offset 20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

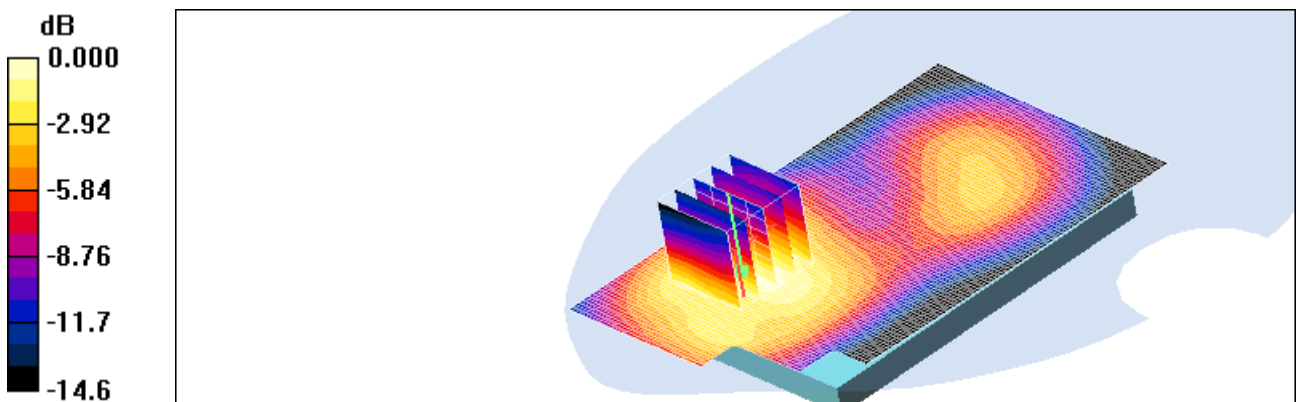
Reference Value = 11.9 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 0.506 W/kg

SAR(1 g) = 0.368 mW/g; SAR(10 g) = 0.236 mW/g

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.404 mW/g



0 dB = 0.404mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance: 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:  
- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19  
- Sensor-Surface: 4mm (Mechanical Surface Detection)  
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27  
- Phantom: 835/900 Phantom ; Type: SAM

LTE Band 4 HotSpot Rear 16QAM 1RB 49offset 20175/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.356 mW/g

LTE Band 4 HotSpot Rear 16QAM 1RB 49offset 20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

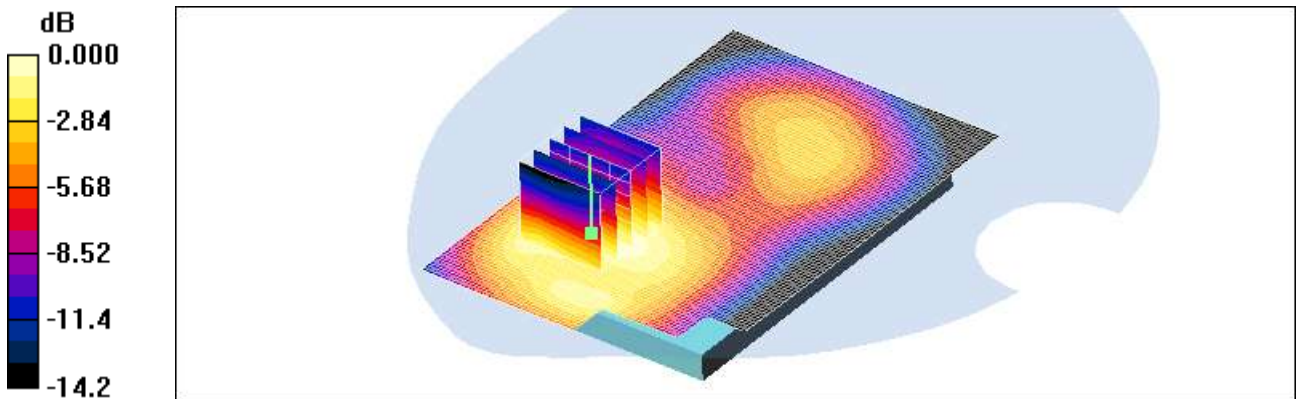
Reference Value = 11.5 V/m; Power Drift = 0.154 dB

Peak SAR (extrapolated) = 0.425 W/kg

SAR(1 g) = 0.319 mW/g; SAR(10 g) = 0.208 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.347 mW/g



0 dB = 0.347mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 HotSpot Front 16QAM 25RB 13offset 20175/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.449 mW/g

**LTE Band 4 HotSpot Front 16QAM 25RB 13offset 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

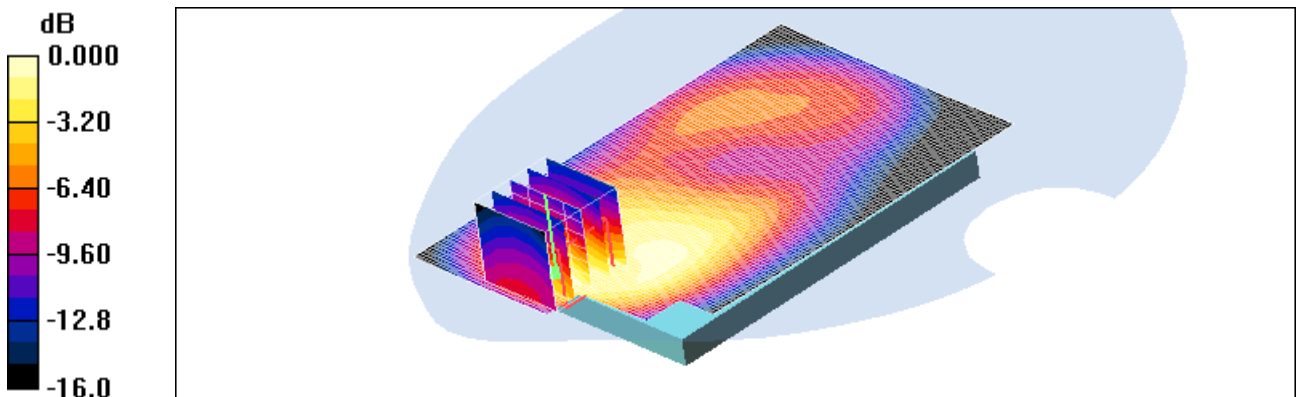
Reference Value = 8.56 V/m; Power Drift = -0.120 dB

Peak SAR (extrapolated) = 0.544 W/kg

**SAR(1 g) = 0.394 mW/g; SAR(10 g) = 0.231 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.453 mW/g



0 dB = 0.453mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 HotSpot Front 16QAM 1RB 0offset 20175/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.577 mW/g

**LTE Band 4 HotSpot Front 16QAM 1RB 0offset 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.95 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.686 W/kg

**SAR(1 g) = 0.528 mW/g; SAR(10 g) = 0.314 mW/g**

Maximum value of SAR (measured) = 0.604 mW/g

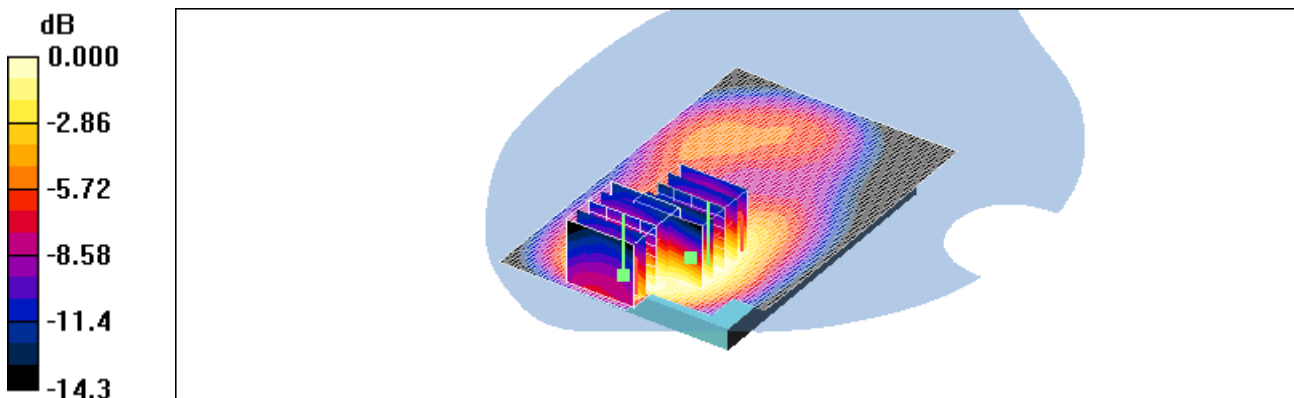
**LTE Band 4 HotSpot Front 16QAM 1RB 0offset 20175/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.95 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.640 W/kg

**SAR(1 g) = 0.483 mW/g; SAR(10 g) = 0.313 mW/g**

Maximum value of SAR (measured) = 0.523 mW/g



0 dB = 0.523mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5 \text{ MHz}$ ;  $\sigma = 1.42 \text{ mho/m}$ ;  $\epsilon_r = 55.3$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

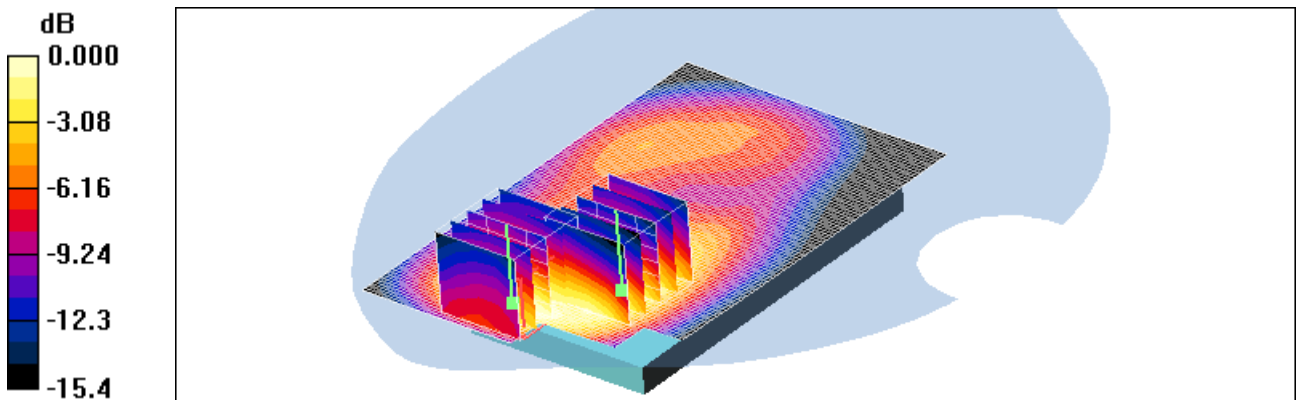
DASY4 Configuration:  
- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19  
- Sensor-Surface: 4mm (Mechanical Surface Detection)  
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27  
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 HotSpot Front 16QAM 1RB 49offset 20175/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.609 mW/g

**LTE Band 4 HotSpot Front 16QAM 1RB 49offset 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 9.86 V/m; Power Drift = 0.024 dB  
Peak SAR (extrapolated) = 0.764 W/kg  
**SAR(1 g) = 0.549 mW/g; SAR(10 g) = 0.320 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)  
Maximum value of SAR (measured) = 0.622 mW/g

**LTE Band 4 HotSpot Front 16QAM 1RB 49offset 20175/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 9.86 V/m; Power Drift = 0.024 dB  
Peak SAR (extrapolated) = 0.653 W/kg  
SAR(1 g) = 0.475 mW/g; SAR(10 g) = 0.300 mW/g  
Maximum value of SAR (measured) = 0.516 mW/g



0 dB = 0.516mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot Body Left side 16QAM 1RB 49offset/Area Scan (41x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.115 mW/g

**LTE Band 4 Hotspot Body Left side 16QAM 1RB 49offset/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

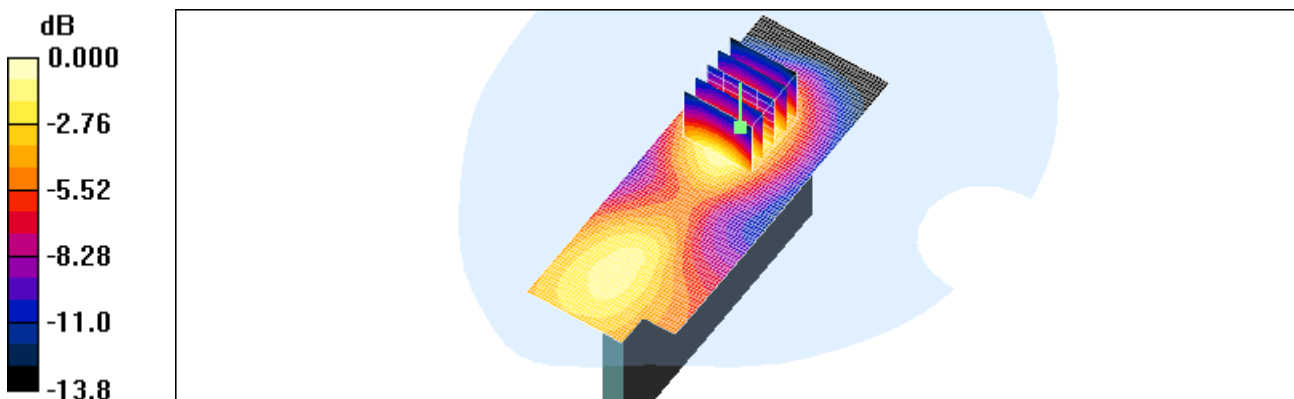
Reference Value = 8.64 V/m; Power Drift = -0.171 dB

Peak SAR (extrapolated) = 0.132 W/kg

**SAR(1 g) = 0.100 mW/g; SAR(10 g) = 0.062 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.110 mW/g



0 dB = 0.110mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

LTE Band 4 Hotspot Body Left side 16QAM 1RB 0offset/Area Scan (41x111x1): Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.146 mW/g

LTE Band 4 Hotspot Body Left side 16QAM 1RB 0offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

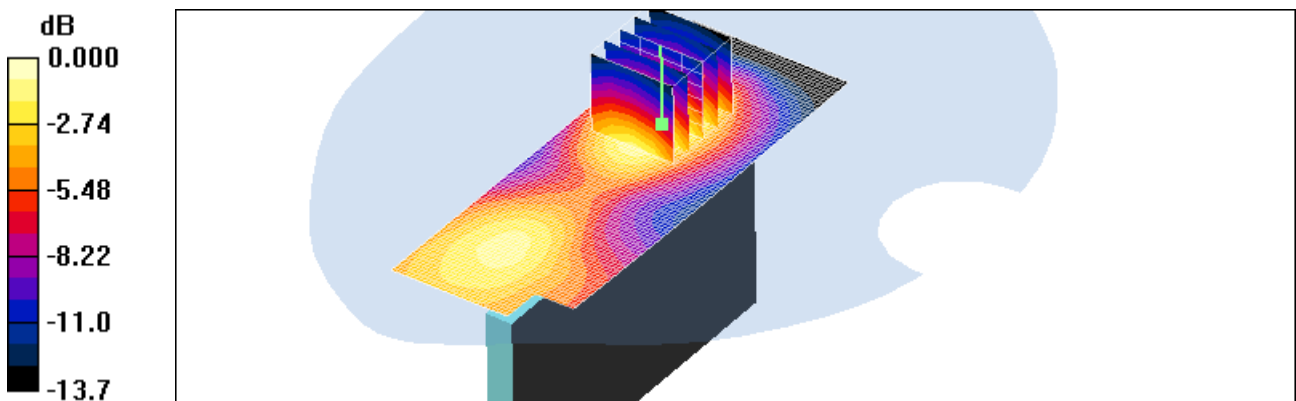
Reference Value = 9.76 V/m; Power Drift = 0.048 dB

Peak SAR (extrapolated) = 0.180 W/kg

SAR(1 g) = 0.131 mW/g; SAR(10 g) = 0.080 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.148 mW/g



0 dB = 0.148mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot Body Left side 16QAM 1RB 49offset/Area Scan (41x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.146 mW/g

**LTE Band 4 Hotspot Body Left side 16QAM 1RB 49offset/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

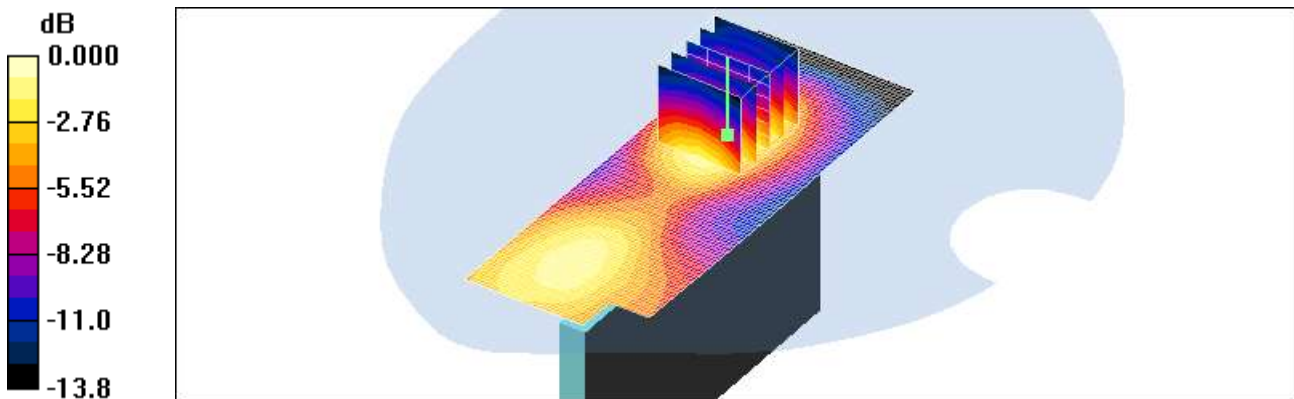
Reference Value = 9.22 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.175 W/kg

**SAR(1 g) = 0.127 mW/g; SAR(10 g) = 0.079 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.142 mW/g



0 dB = 0.142mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

LTE Band 4 Hotspot Body Right side 16QAM 25RB 13offset/Area Scan (41x111x1): Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.250 mW/g

LTE Band 4 Hotspot Body Right side 16QAM 25RB 13offset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

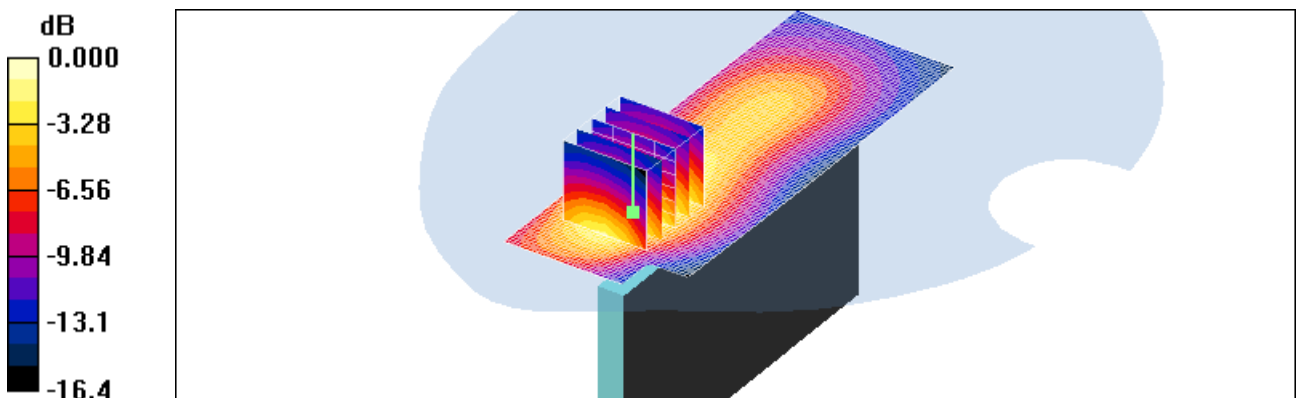
Reference Value = 6.56 V/m; Power Drift = 0.052 dB

Peak SAR (extrapolated) = 0.288 W/kg

SAR(1 g) = 0.205 mW/g; SAR(10 g) = 0.125 mW/g

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.230 mW/g



0 dB = 0.230mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot Body Right side 16QAM 1RB 0 offset/Area Scan (41x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.326 mW/g

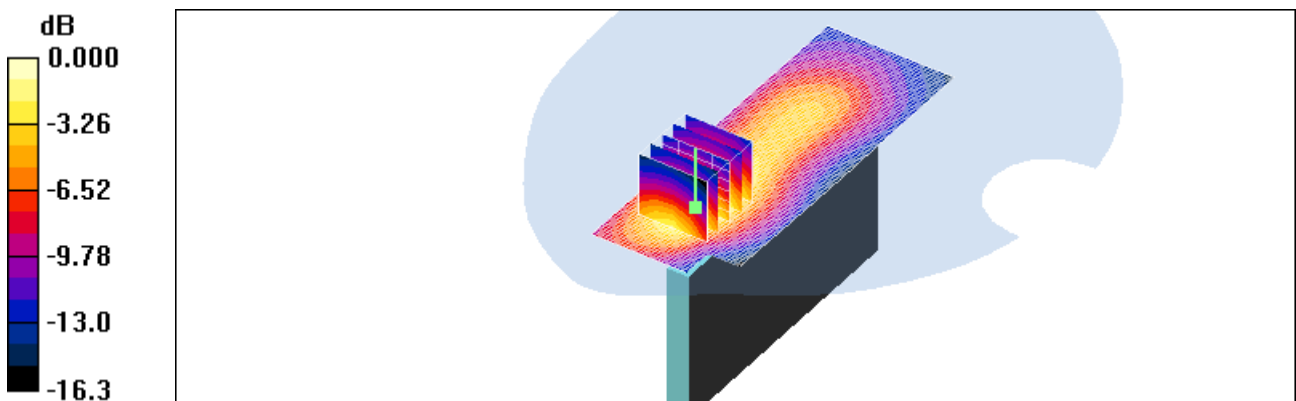
**LTE Band 4 Hotspot Body Right side 16QAM 1RB 0 offset/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.95 V/m; Power Drift = 0.177 dB

Peak SAR (extrapolated) = 0.387 W/kg

**SAR(1 g) = 0.274 mW/g; SAR(10 g) = 0.166 mW/g**

Maximum value of SAR (measured) = 0.309 mW/g



0 dB = 0.309mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot Body Right side 16QAM 1RB 49 offset/Area Scan (41x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.313 mW/g

**LTE Band 4 Hotspot Body Right side 16QAM 1RB 49 offset/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:

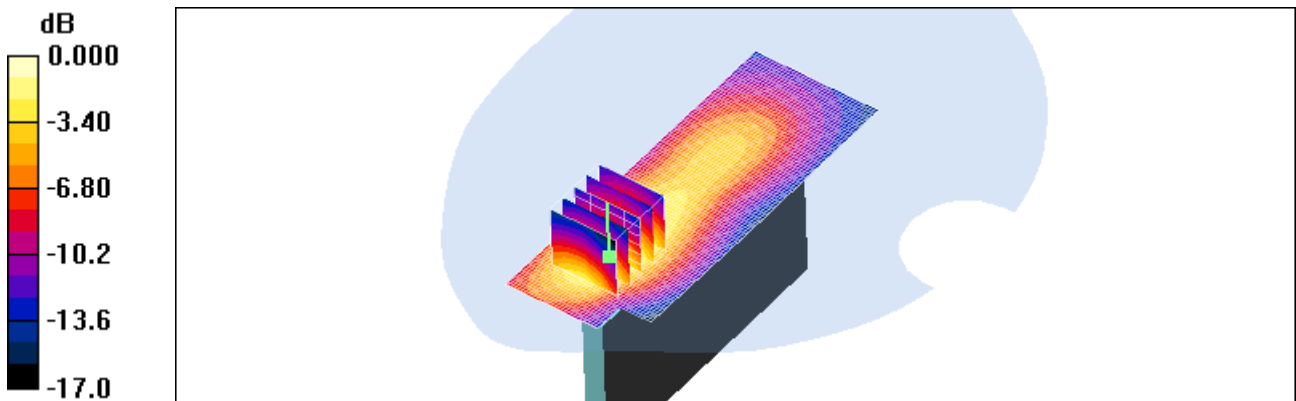
dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.91 V/m; Power Drift = 0.038 dB

Peak SAR (extrapolated) = 0.382 W/kg

**SAR(1 g) = 0.263 mW/g; SAR(10 g) = 0.159 mW/g**

Maximum value of SAR (measured) = 0.296 mW/g



0 dB = 0.296mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

LTE Band 4 Hotspot bottom 16QAM 25RB 13 Offset 20175ch/Area Scan (51x71x1): Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.741 mW/g

LTE Band 4 Hotspot bottom 16QAM 25RB 13 Offset 20175ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

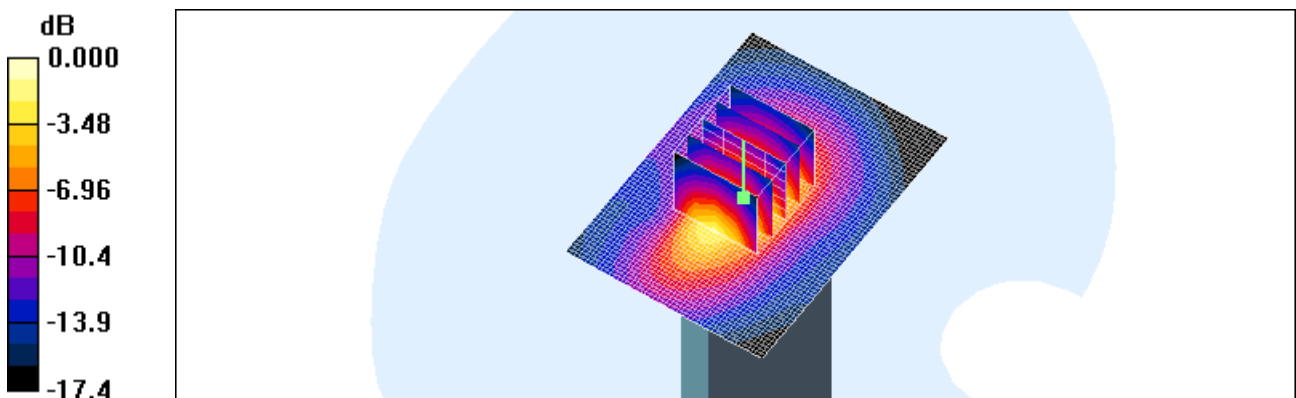
Reference Value = 23.2 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 0.960 W/kg

SAR(1 g) = 0.637 mW/g; SAR(10 g) = 0.337 mW/g

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.750 mW/g



0 dB = 0.750mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot bottom 16QAM 1RB 0 Offset 20175ch/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.888 mW/g

**LTE Band 4 Hotspot bottom 16QAM 1RB 0 Offset 20175ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:

dx=8mm, dy=8mm, dz=5mm

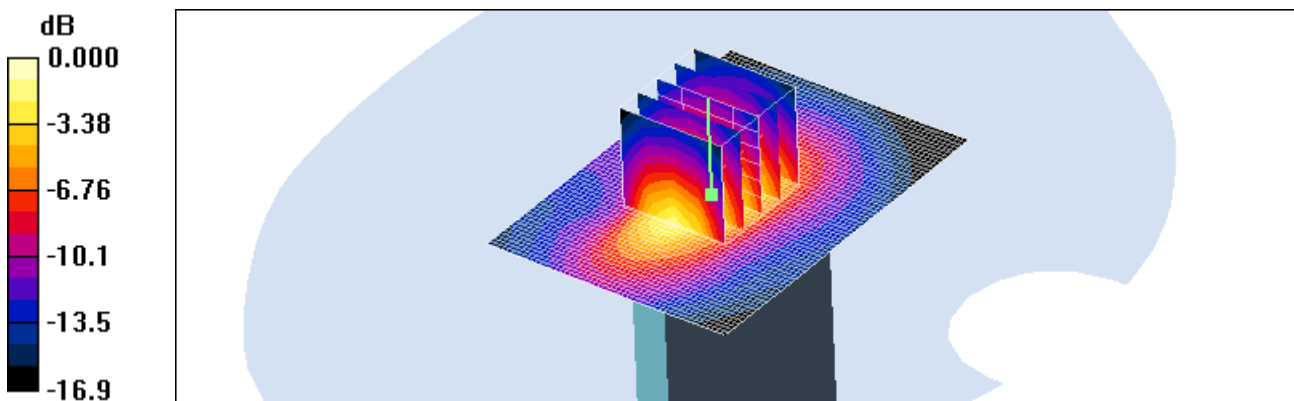
Reference Value = 25.7 V/m; Power Drift = -0.156 dB

Peak SAR (extrapolated) = 1.05 W/kg

**SAR(1 g) = 0.738 mW/g; SAR(10 g) = 0.407 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.840 mW/g



0 dB = 0.840mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

LTE Band 4 Hotspot bottom 16QAM 1RB 49Offset 20175ch/Area Scan (51x71x1): Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.834 mW/g

LTE Band 4 Hotspot bottom 16QAM 1RB 49Offset 20175ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

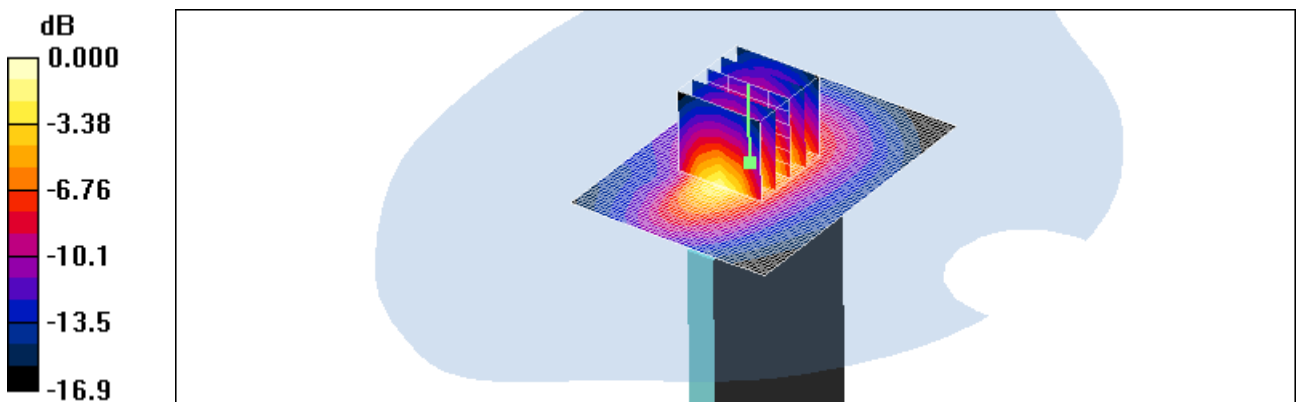
Reference Value = 21.8 V/m; Power Drift = 0.058 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.718 mW/g; SAR(10 g) = 0.390 mW/g

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.820 mW/g



0 dB = 0.820mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 2.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**LTE Band 4 Body worn Rear QPSK 25RB 13offset 20175/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.217 mW/g

**LTE Band 4 Body worn Rear QPSK 25RB 13offset 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

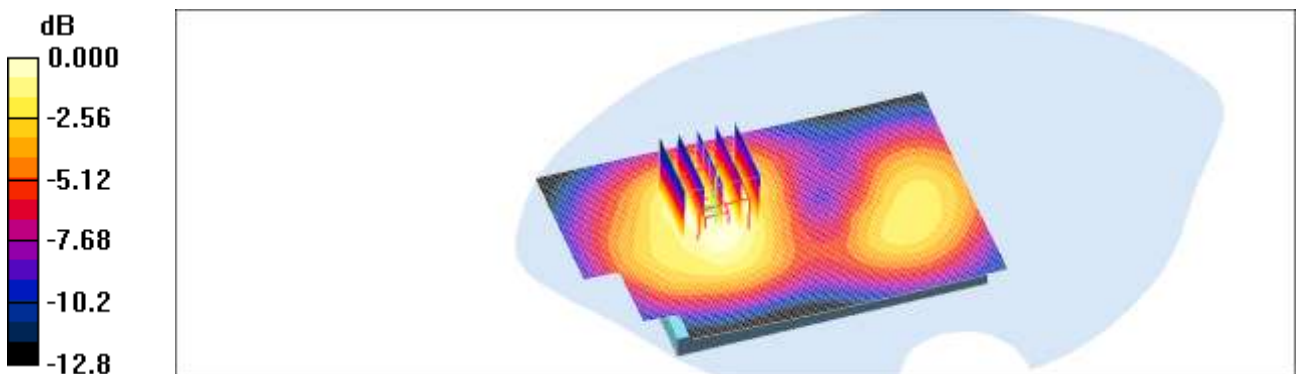
Reference Value = 9.35 V/m; Power Drift = -0.180 dB

Peak SAR (extrapolated) = 0.256 W/kg

**SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.135 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.211 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 2.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 4 Body worn Rear QPSK 1RB 0offset 20175/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.282 mW/g

LTE Band 4 Body worn Rear QPSK 1RB 0offset 20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

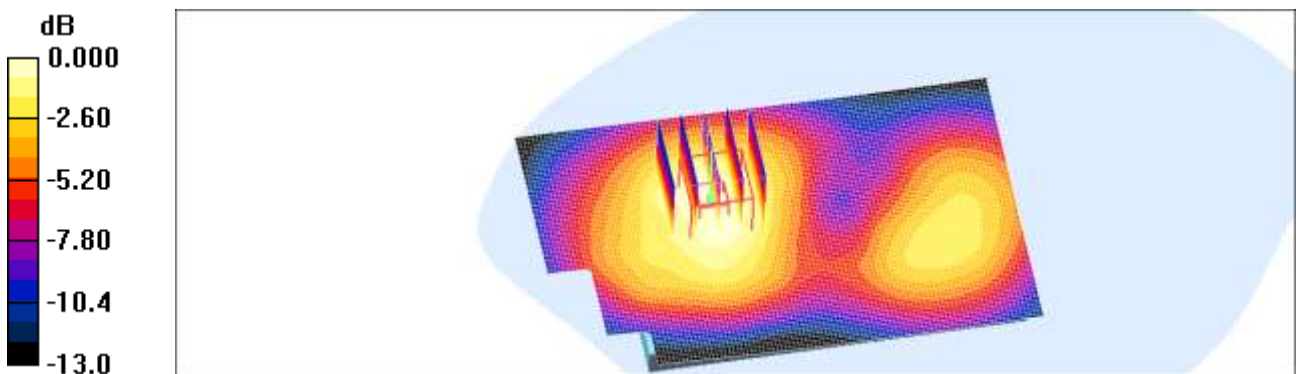
Reference Value = 10.3 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 0.340 W/kg

SAR(1 g) = 0.253 mW/g; SAR(10 g) = 0.172 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.278 mW/g



0 dB = 0.278mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 2.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 4 Body worn Rear QPSK 1RB 49offset 20175/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.249 mW/g

LTE Band 4 Body worn Rear QPSK 1RB 49offset 20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

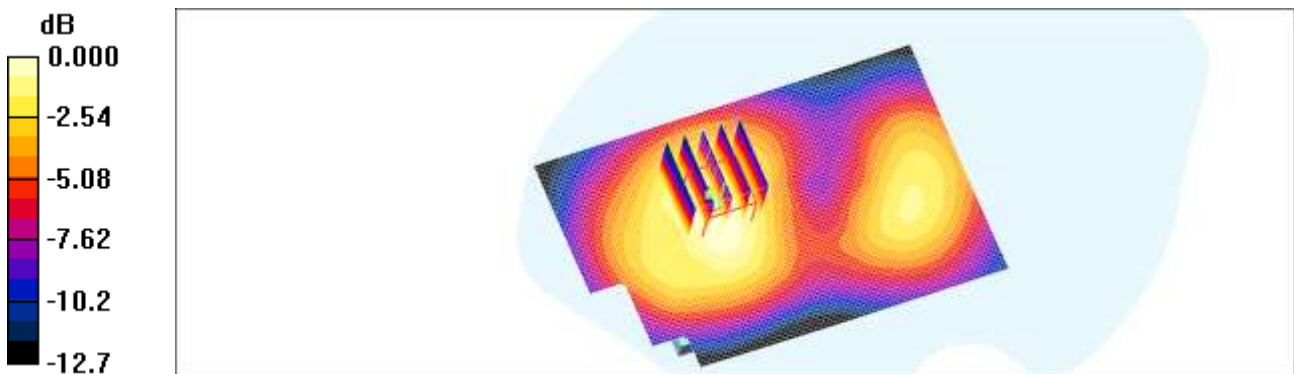
Reference Value = 9.67 V/m; Power Drift = -0.040 dB

Peak SAR (extrapolated) = 0.295 W/kg

SAR(1 g) = 0.223 mW/g; SAR(10 g) = 0.154 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.237 mW/g



0 dB = 0.237mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 2.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 4 Body Worn Front QPSK 25RB 13offset 20175/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.282 mW/g

LTE Band 4 Body Worn Front QPSK 25RB 13offset 20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

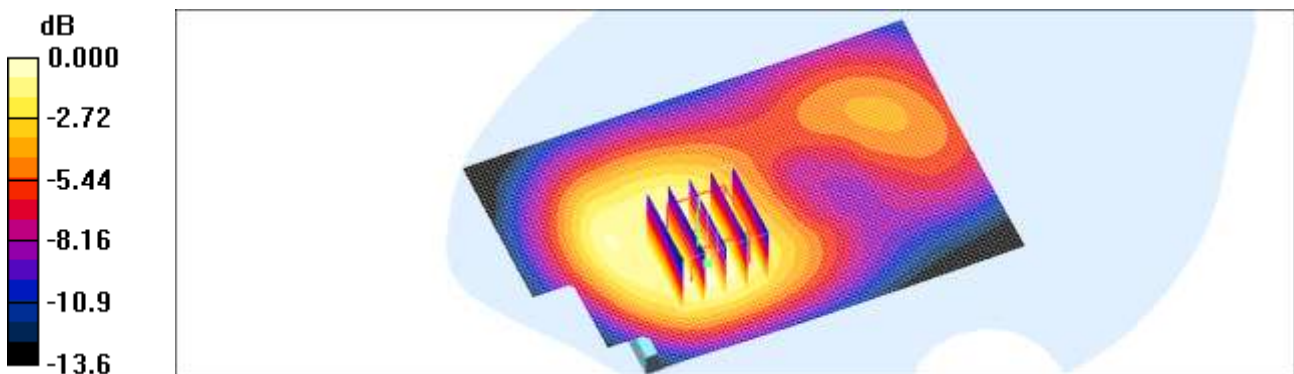
Reference Value = 7.09 V/m; Power Drift = 0.006 dB

Peak SAR (extrapolated) = 0.340 W/kg

SAR(1 g) = 0.265 mW/g; SAR(10 g) = 0.181 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.284 mW/g



0 dB = 0.284mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 2.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 4 Body Worn Front QPSK 1RB 0 offset 20175/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.359 mW/g

LTE Band 4 Body Worn Front QPSK 1RB 0 offset 20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

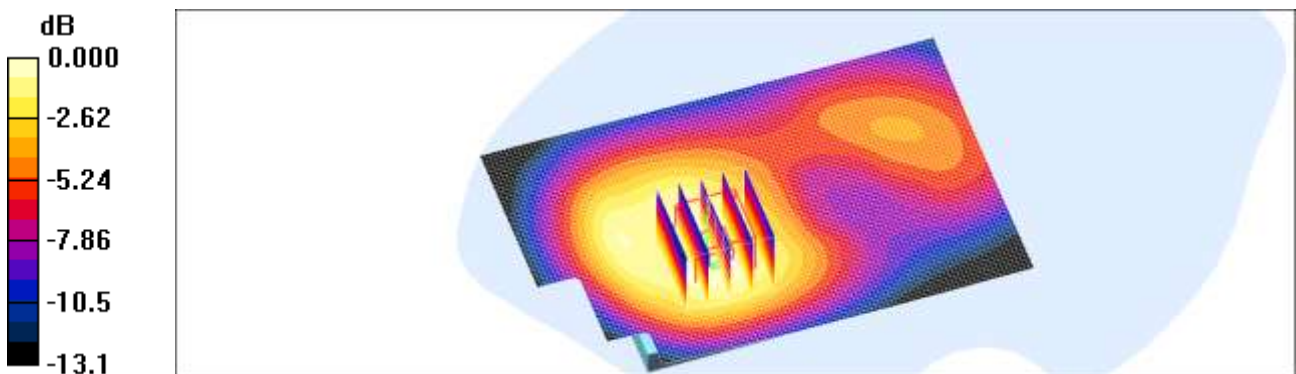
Reference Value = 8.07 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 0.440 W/kg

SAR(1 g) = 0.336 mW/g; SAR(10 g) = 0.230 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.359 mW/g



0 dB = 0.359mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 2.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 4 Body Worn Front QPSK 1RB 49offset 20175/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.344 mW/g

LTE Band 4 Body Worn Front QPSK 1RB 49offset 20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

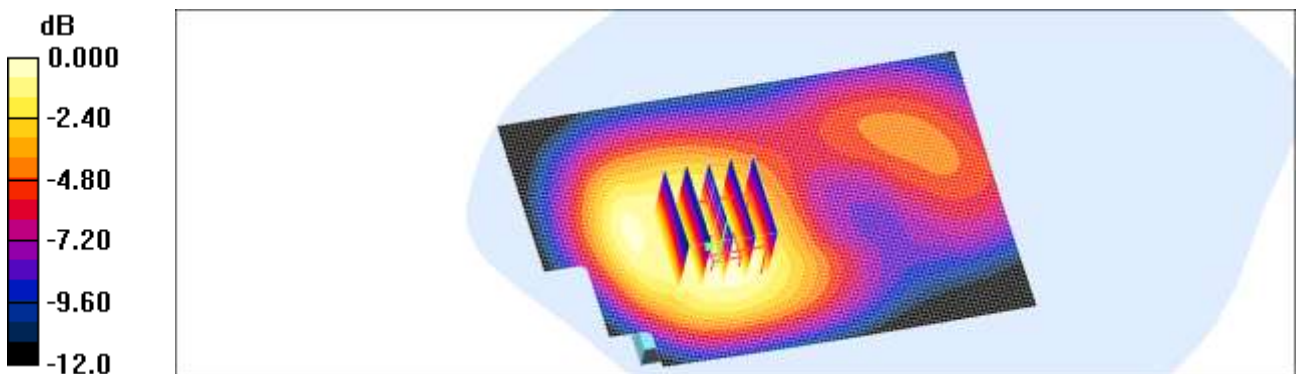
Reference Value = 7.89 V/m; Power Drift = 0.142 dB

Peak SAR (extrapolated) = 0.413 W/kg

SAR(1 g) = 0.319 mW/g; SAR(10 g) = 0.217 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.346 mW/g



0 dB = 0.346mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 2.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 4 Body Worn Rear 16QAM 25RB 13offset 20175/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.146 mW/g

LTE Band 4 Body Worn Rear 16QAM 25RB 13offset 20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

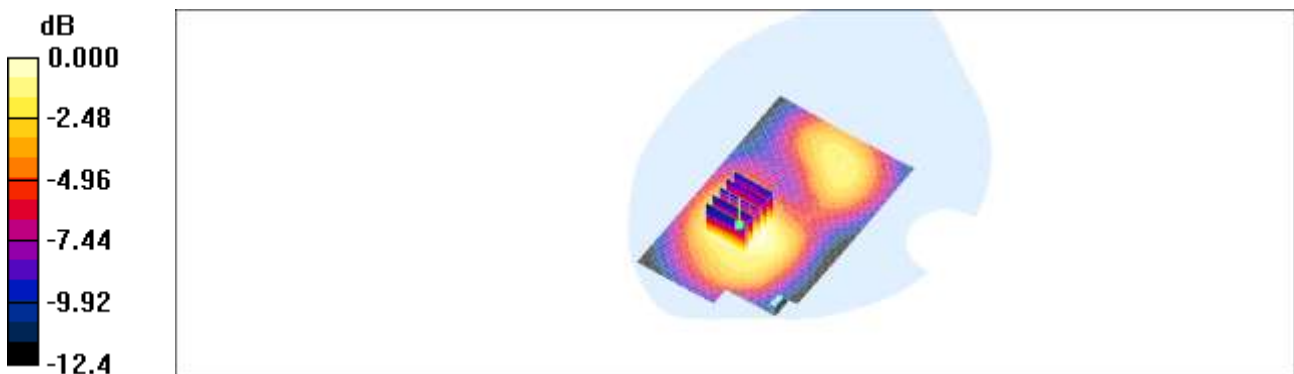
Reference Value = 7.46 V/m; Power Drift = -0.127 dB

Peak SAR (extrapolated) = 0.168 W/kg

SAR(1 g) = 0.130 mW/g; SAR(10 g) = 0.089 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.140 mW/g



0 dB = 0.140mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 2.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 4 Body Worn Rear 16QAM 1RB 0offset 20175/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.217 mW/g

LTE Band 4 Body Worn Rear 16QAM 1RB 0offset 20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

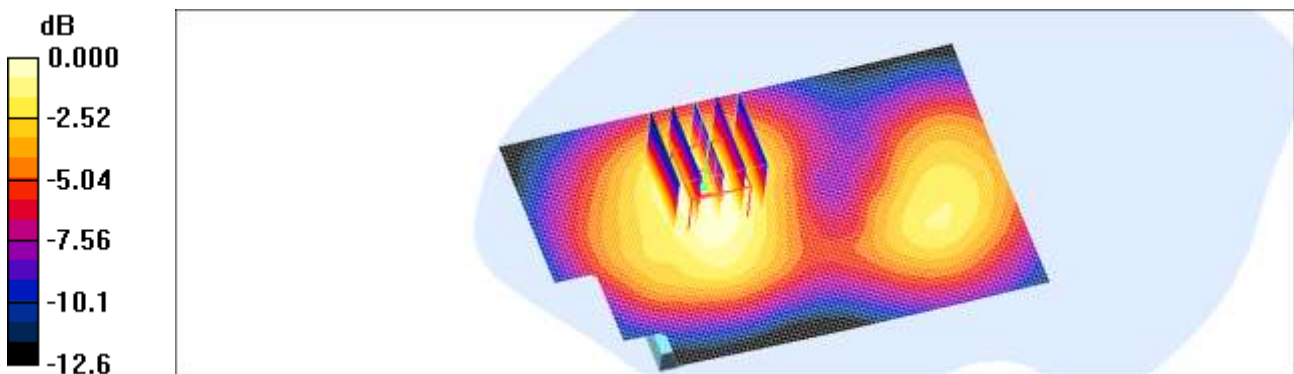
Reference Value = 9.12 V/m; Power Drift = 0.183 dB

Peak SAR (extrapolated) = 0.252 W/kg

SAR(1 g) = 0.193 mW/g; SAR(10 g) = 0.133 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.207 mW/g



0 dB = 0.207mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 2.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 4 Body Worn Rear 16QAM 1RB 49offset 20175/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.190 mW/g

LTE Band 4 Body Worn Rear 16QAM 1RB 49offset 20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

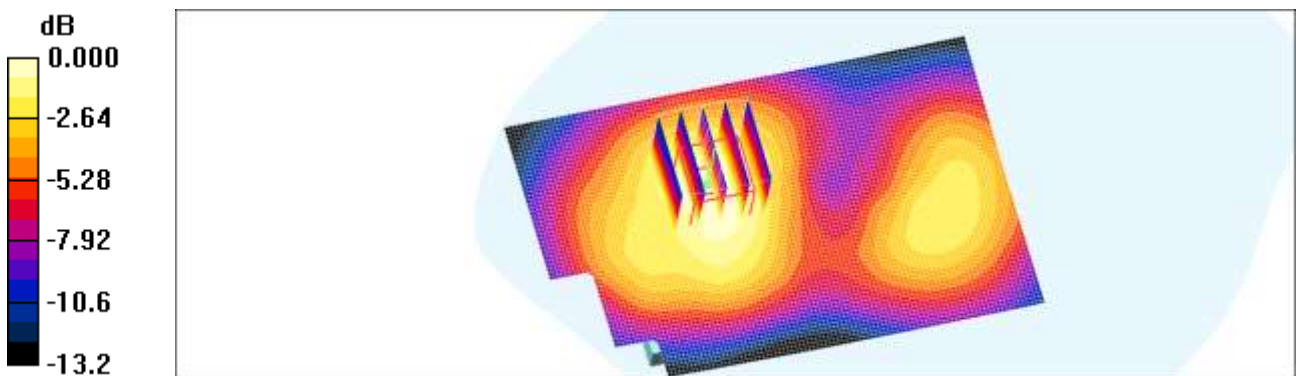
Reference Value = 8.56 V/m; Power Drift = 0.097 dB

Peak SAR (extrapolated) = 0.233 W/kg

SAR(1 g) = 0.178 mW/g; SAR(10 g) = 0.120 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.195 mW/g



0 dB = 0.195mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 2.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 4 Body Worn Front 16QAM 25RB 13offset 20175/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.160 mW/g

LTE Band 4 Body Worn Front 16QAM 25RB 13offset 20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

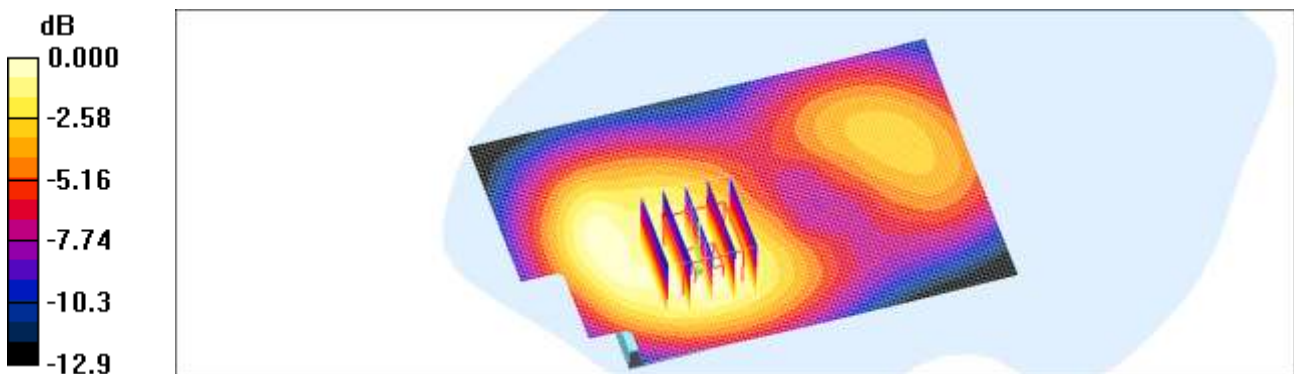
Reference Value = 6.88 V/m; Power Drift = -0.181 dB

Peak SAR (extrapolated) = 0.193 W/kg

SAR(1 g) = 0.148 mW/g; SAR(10 g) = 0.101 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.158 mW/g



0 dB = 0.158mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 2.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 4 Body Worn Front 16QAM 1RB 0 offset 20175/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.236 mW/g

LTE Band 4 Body Worn Front 16QAM 1RB 0 offset 20175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

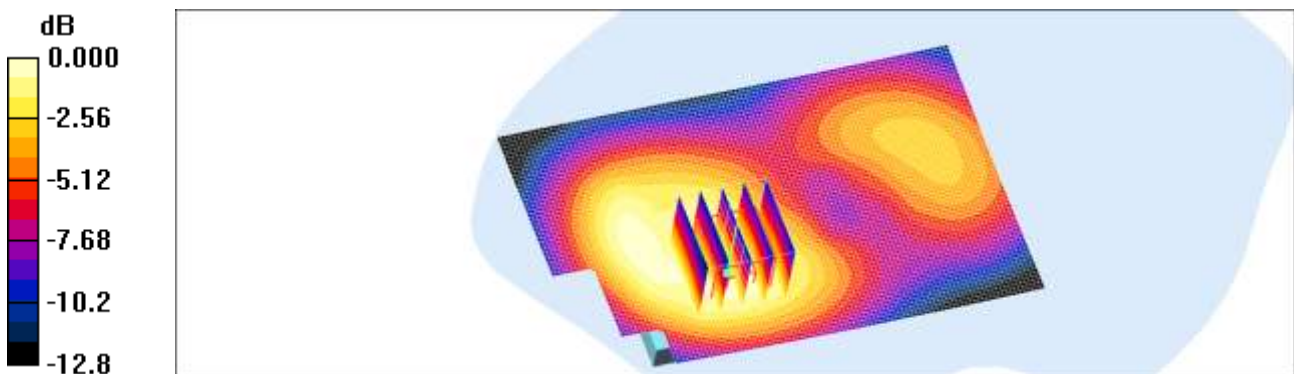
Reference Value = 7.82 V/m; Power Drift = 0.116 dB

Peak SAR (extrapolated) = 0.274 W/kg

SAR(1 g) = 0.211 mW/g; SAR(10 g) = 0.143 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.223 mW/g



0 dB = 0.223mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012  
Separation Distance 2.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**LTE Band 4 Body Worn Front 16QAM 1RB 49offset 20175/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.213 mW/g

**LTE Band 4 Body Worn Front 16QAM 1RB 49offset 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

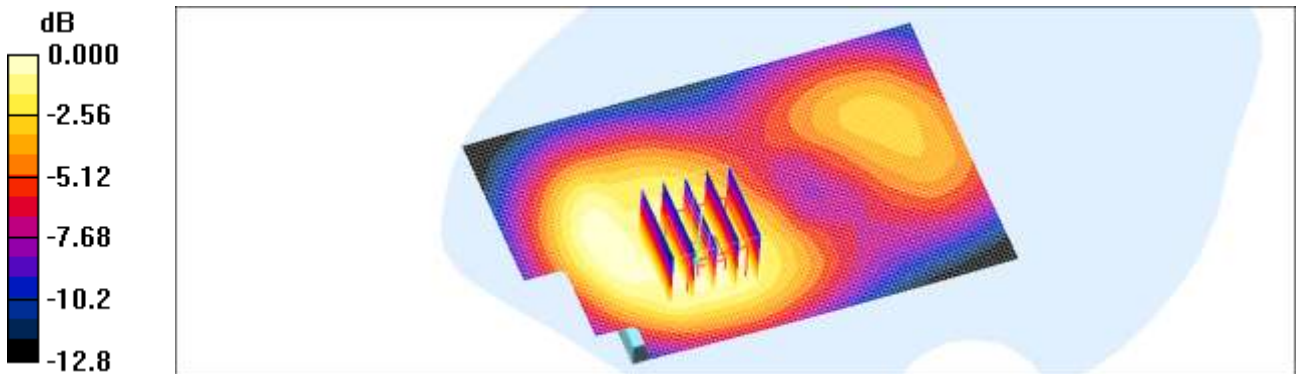
Reference Value = 7.86 V/m; Power Drift = -0.147 dB

Peak SAR (extrapolated) = 0.252 W/kg

**SAR(1 g) = 0.199 mW/g; SAR(10 g) = 0.136 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.212 mW/g



0 dB = 0.212mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

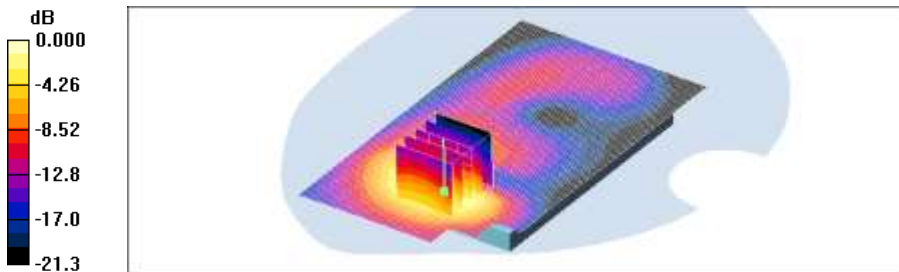
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 HotSpot Rear QPSK 25RB 13offset 18900/Area Scan (71x121x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.376 mW/g

**LTE Band 2 HotSpot Rear QPSK 25RB 13offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 2.12 V/m; Power Drift = 0.006 dB  
Peak SAR (extrapolated) = 0.491 W/kg  
**SAR(1 g) = 0.309 mW/g; SAR(10 g) = 0.170 mW/g**  
Maximum value of SAR (measured) = 0.336 mW/g



0 dB = 0.336mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 HotSpot Rear QPSK 1RB 0 offset 18900/Area Scan (71x121x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.479 mW/g

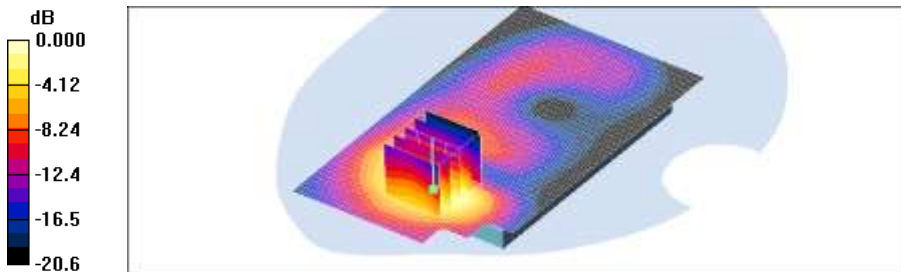
**LTE Band 2 HotSpot Rear QPSK 1RB 0 offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.46 V/m; Power Drift = -0.033 dB

Peak SAR (extrapolated) = 0.606 W/kg

**SAR(1 g) = 0.384 mW/g; SAR(10 g) = 0.212 mW/g**

Maximum value of SAR (measured) = 0.423 mW/g



0 dB = 0.423mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

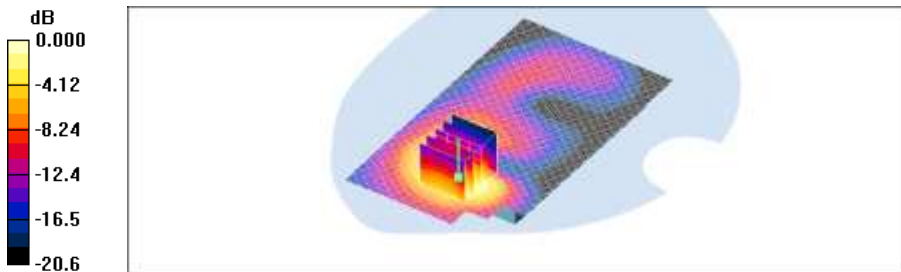
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 HotSpot Rear QPSK 1RB 49 offset 18900/Area Scan (71x121x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.558 mW/g

**LTE Band 2 HotSpot Rear QPSK 1RB 49 offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 2.53 V/m; Power Drift = -0.090 dB  
Peak SAR (extrapolated) = 0.687 W/kg  
**SAR(1 g) = 0.442 mW/g; SAR(10 g) = 0.245 mW/g**  
Maximum value of SAR (measured) = 0.493 mW/g



0 dB = 0.493mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 HotSpot Front QPSK 25RB 13offset 18900/Area Scan (71x121x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.622 mW/g

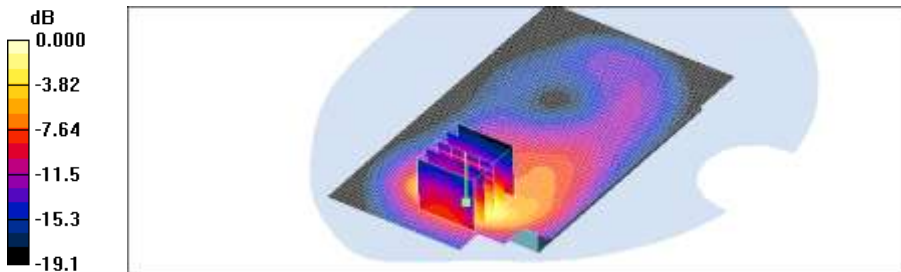
**LTE Band 2 HotSpot Front QPSK 25RB 13offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.08 V/m; Power Drift = -0.035 dB

Peak SAR (extrapolated) = 0.994 W/kg

**SAR(1 g) = 0.613 mW/g; SAR(10 g) = 0.309 mW/g**

Maximum value of SAR (measured) = 0.656 mW/g



0 dB = 0.656mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 HotSpot Front QPSK 1RB 0 offset 18900/Area Scan (71x121x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.759 mW/g

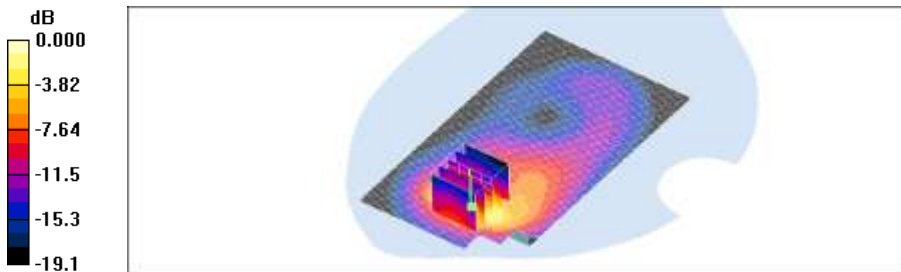
**LTE Band 2 HotSpot Front QPSK 1RB 0 offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.54 V/m; Power Drift = -0.100 dB

Peak SAR (extrapolated) = 1.28 W/kg

**SAR(1 g) = 0.768 mW/g; SAR(10 g) = 0.387 mW/g**

Maximum value of SAR (measured) = 0.823 mW/g



0 dB = 0.823mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

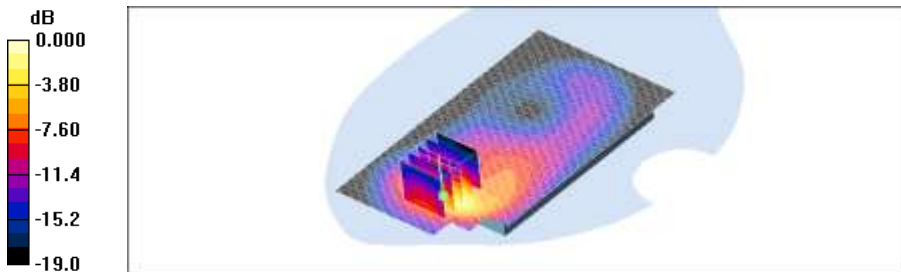
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 HotSpot Front QPSK 1RB 49offset 18900/Area Scan (71x121x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.868 mW/g

**LTE Band 2 HotSpot Front QPSK 1RB 49offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.72 V/m; Power Drift = -0.086 dB  
Peak SAR (extrapolated) = 1.43 W/kg  
**SAR(1 g) = 0.878 mW/g; SAR(10 g) = 0.443 mW/g**  
Maximum value of SAR (measured) = 0.963 mW/g



0 dB = 0.963mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

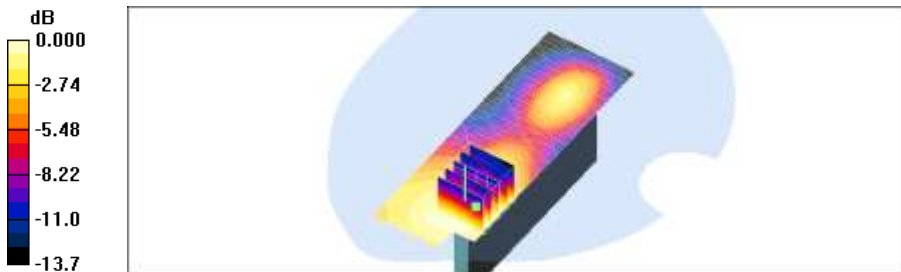
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot Body Left side QPSK 25RB 13 offset 18900ch/Area Scan (41x121x1):** Measurement grid:  
dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.033 mW/g

**LTE Band 2 Hotspot Body Left side QPSK 25RB 13 offset 18900ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  
dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.24 V/m; Power Drift = 0.046 dB  
Peak SAR (extrapolated) = 0.046 W/kg  
**SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.021 mW/g**  
Maximum value of SAR (measured) = 0.034 mW/g



0 dB = 0.034mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot Body Left side QPSK 1RB 0 offset 18900ch/Area Scan (41x121x1):** Measurement grid:  
dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.043 mW/g  
0

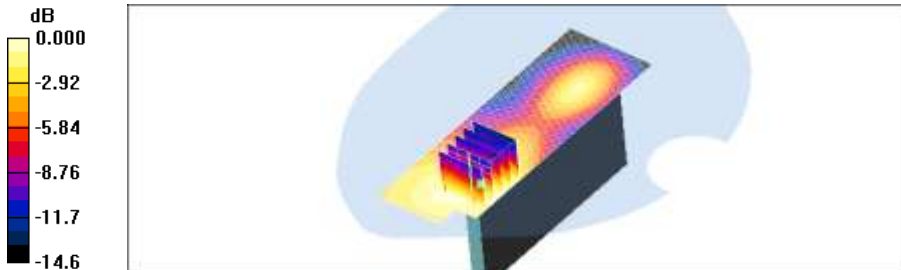
**LTE Band 2 Hotspot Body Left side QPSK 1RB 0 offset 18900ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  
dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.78 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.059 W/kg

**SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.027 mW/g**

Maximum value of SAR (measured) = 0.045 mW/g



0 dB = 0.045mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

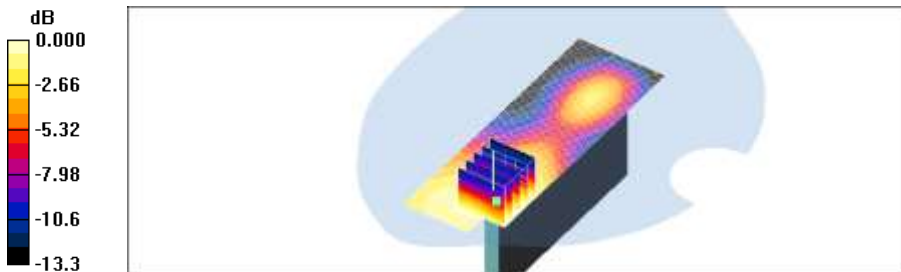
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot Body Left side QPSK 1RB 49 offset 18900ch/Area Scan (41x121x1):** Measurement grid:  
dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.046 mW/g

**LTE Band 2 Hotspot Body Left side QPSK 1RB 49 offset 18900ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  
dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.73 V/m; Power Drift = -0.058 dB  
Peak SAR (extrapolated) = 0.059 W/kg  
**SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.028 mW/g**  
Maximum value of SAR (measured) = 0.046 mW/g



0 dB = 0.046mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

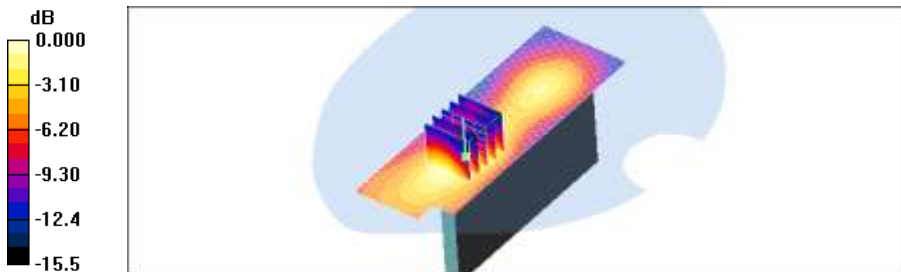
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot Body Right side QPSK 25RB 13offset 18900ch/Area Scan (41x121x1):** Measurement grid:  
dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.108 mW/g

**LTE Band 2 Hotspot Body Right side QPSK 25RB 13offset 18900ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  
dx=8mm, dy=8mm, dz=5mm  
Reference Value = 6.32 V/m; Power Drift = 0.017 dB  
Peak SAR (extrapolated) = 0.129 W/kg  
**SAR(1 g) = 0.090 mW/g; SAR(10 g) = 0.052 mW/g**  
Maximum value of SAR (measured) = 0.095 mW/g



0 dB = 0.095mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

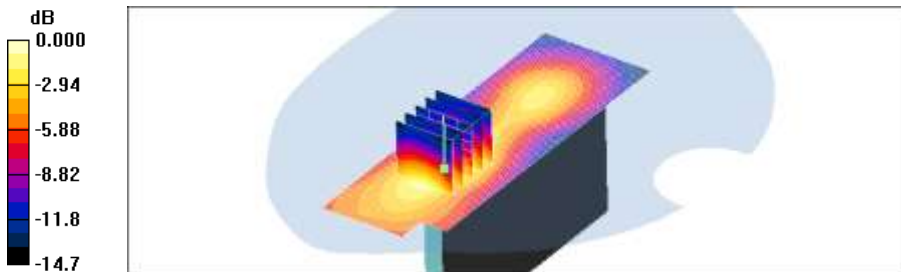
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot Body Right side QPSK 1RB 0offset 18900ch/Area Scan (41x121x1):** Measurement grid:  
dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.126 mW/g

**LTE Band 2 Hotspot Body Right side QPSK 1RB 0offset 18900ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  
dx=8mm, dy=8mm, dz=5mm  
Reference Value = 7.36 V/m; Power Drift = -0.089 dB  
Peak SAR (extrapolated) = 0.165 W/kg  
**SAR(1 g) = 0.114 mW/g; SAR(10 g) = 0.068 mW/g**  
Maximum value of SAR (measured) = 0.127 mW/g



0 dB = 0.127mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

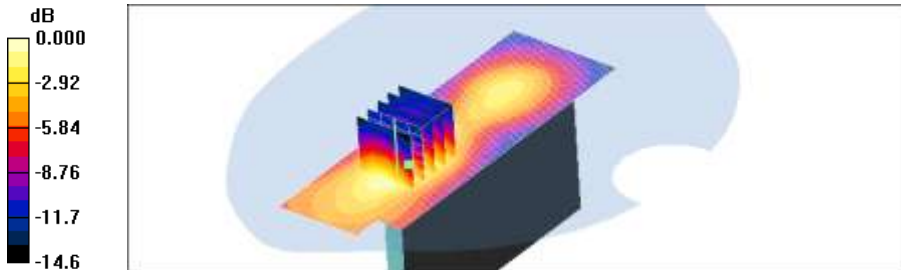
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot Body Right side QPSK 1RB 49offset 18900ch/Area Scan (41x121x1):** Measurement grid:  
dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.142 mW/g

**LTE Band 2 Hotspot Body Right side QPSK 1RB 49offset 18900ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  
dx=8mm, dy=8mm, dz=5mm  
Reference Value = 7.62 V/m; Power Drift = 0.021 dB  
Peak SAR (extrapolated) = 0.186 W/kg  
**SAR(1 g) = 0.125 mW/g; SAR(10 g) = 0.075 mW/g**  
Maximum value of SAR (measured) = 0.137 mW/g



0 dB = 0.137mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot bottom QPSK 25RB 13 Offset 18900/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.03 mW/g

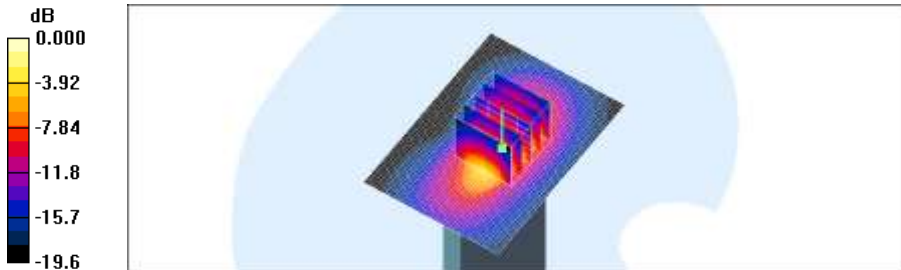
**LTE Band 2 Hotspot bottom QPSK 25RB 13 Offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.3 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 1.33 W/kg

**SAR(1 g) = 0.799 mW/g; SAR(10 g) = 0.394 mW/g**

Maximum value of SAR (measured) = 0.942 mW/g



0 dB = 0.942mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot bottom QPSK 1RB 0 Offset 18900/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.37 mW/g

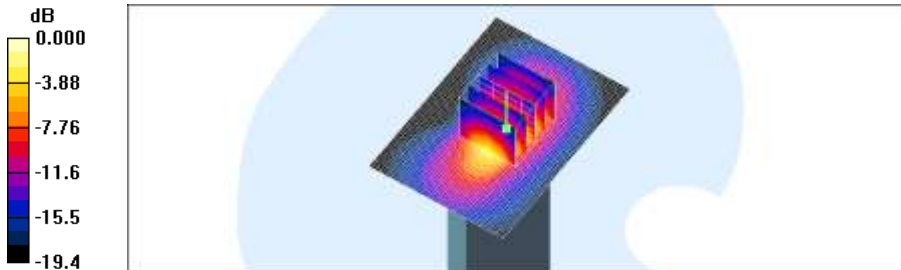
**LTE Band 2 Hotspot bottom QPSK 1RB 0 Offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.9 V/m; Power Drift = -0.087 dB

Peak SAR (extrapolated) = 1.65 W/kg

**SAR(1 g) = 0.999 mW/g; SAR(10 g) = 0.501 mW/g**

Maximum value of SAR (measured) = 1.14 mW/g



0 dB = 1.14mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

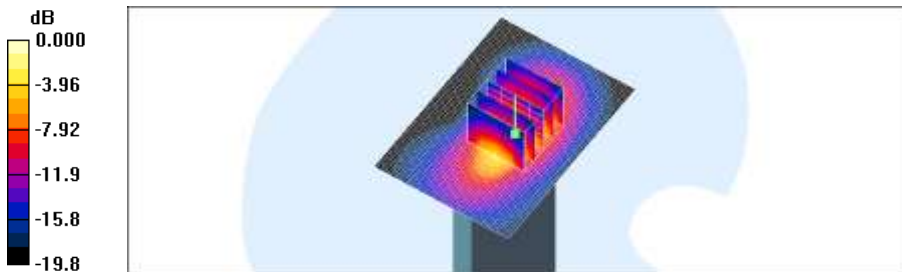
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot bottom QPSK 1RB 49Offset 18900ch/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.52 mW/g

**LTE Band 2 Hotspot bottom QPSK 1RB 49Offset 18900ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 28.0 V/m; Power Drift = -0.113 dB  
Peak SAR (extrapolated) = 1.97 W/kg  
**SAR(1 g) = 1.23 mW/g; SAR(10 g) = 0.614 mW/g**  
Maximum value of SAR (measured) = 1.38 mW/g



0 dB = 1.38mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

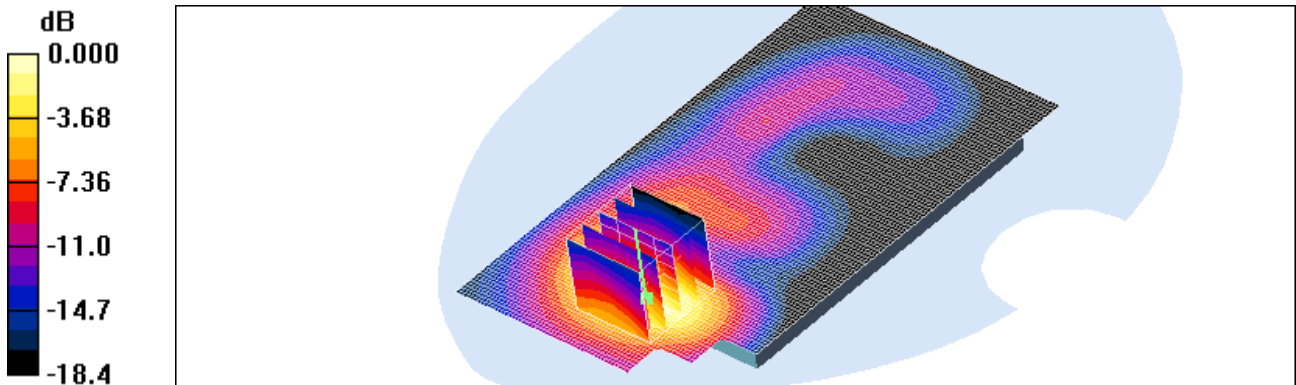
Communication System: LTE Band 2; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 HotSpot Rear 16QAM 25RB 13 offset 18900/Area Scan (71x121x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.260 mW/g

**LTE Band 2 HotSpot Rear 16QAM 25RB 13 offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 2.07 V/m; Power Drift = -0.047 dB  
Peak SAR (extrapolated) = 0.385 W/kg  
**SAR(1 g) = 0.239 mW/g; SAR(10 g) = 0.130 mW/g**  
Maximum value of SAR (measured) = 0.262 mW/g



0 dB = 0.262mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Band 2 HotSpot Rear 16QAM 1RB 0offset 18900/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.292 mW/g

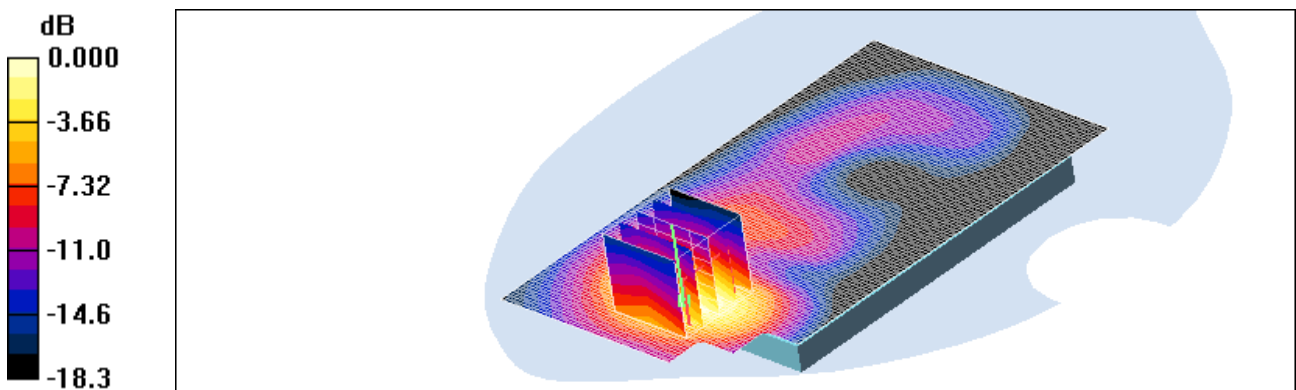
LTE Band 2 HotSpot Rear 16QAM 1RB 0offset 18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.19 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.447 W/kg

**SAR(1 g) = 0.280 mW/g; SAR(10 g) = 0.152 mW/g**

Maximum value of SAR (measured) = 0.299 mW/g



0 dB = 0.299mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 2; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 HotSpot Rear 16QAM 1RB 49offset 18900/Area Scan (71x121x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.340 mW/g

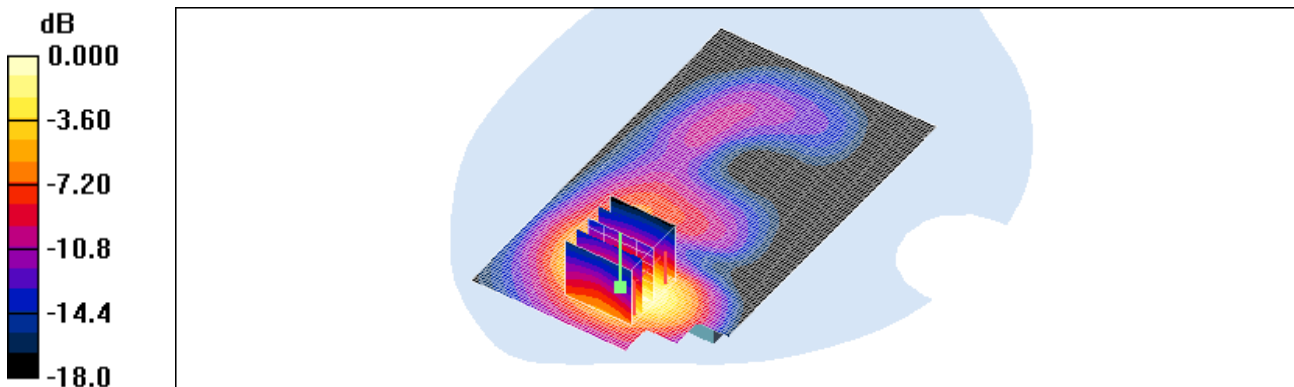
**LTE Band 2 HotSpot Rear 16QAM 1RB 49offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.26 V/m; Power Drift = 0.171 dB

Peak SAR (extrapolated) = 0.509 W/kg

**SAR(1 g) = 0.330 mW/g; SAR(10 g) = 0.178 mW/g**

Maximum value of SAR (measured) = 0.356 mW/g



0 dB = 0.356mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 2; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 HotSpot Front 16QAM 25RB 13offset 18900/Area Scan (71x121x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.498 mW/g

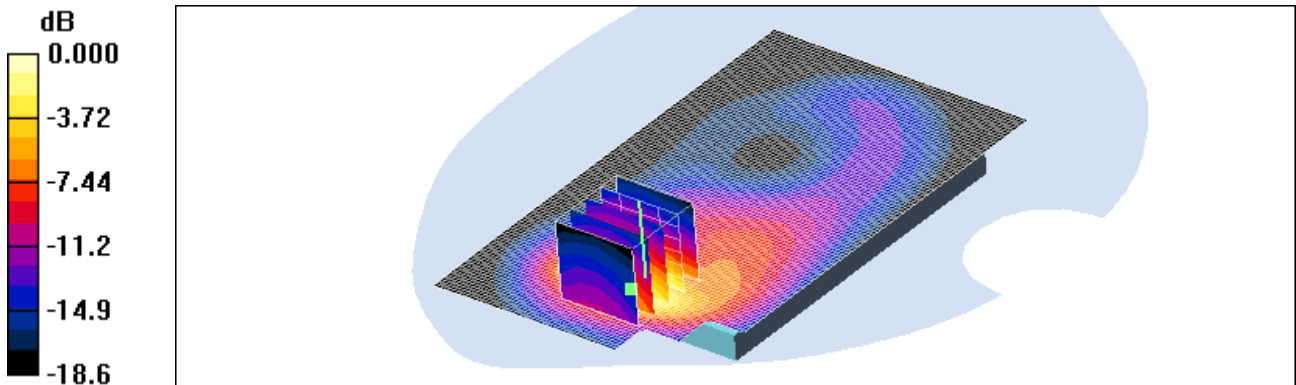
**LTE Band 2 HotSpot Front 16QAM 25RB 13offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.79 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.885 W/kg

**SAR(1 g) = 0.540 mW/g; SAR(10 g) = 0.266 mW/g**

Maximum value of SAR (measured) = 0.606 mW/g



0 dB = 0.606mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Band 2 HotSpot Front 16QAM 1RB Offset 18900/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.653 mW/g

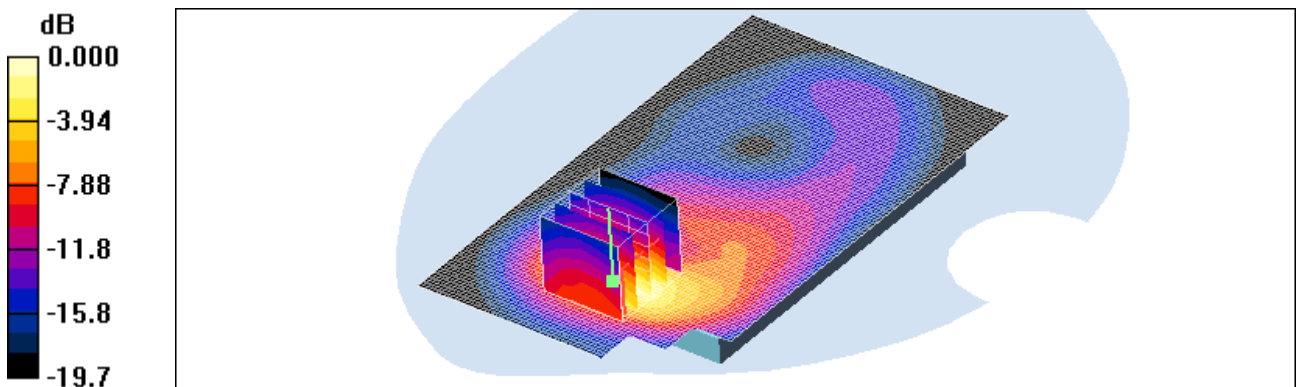
LTE Band 2 HotSpot Front 16QAM 1RB Offset 18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.87 V/m; Power Drift = -0.060 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.625 mW/g; SAR(10 g) = 0.307 mW/g

Maximum value of SAR (measured) = 0.694 mW/g



0 dB = 0.694mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8  
Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Band 2 HotSpot Front 16QAM 1RB 49offset 18900/Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.769 mW/g

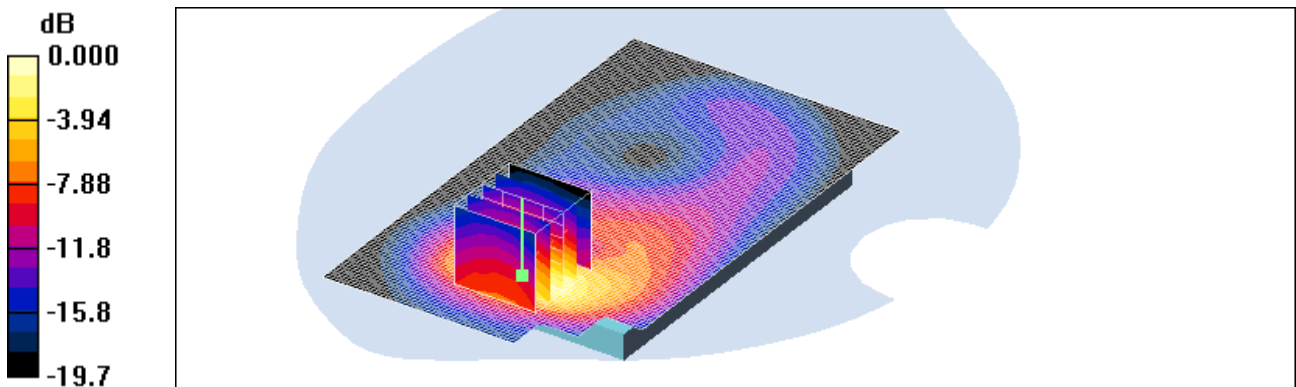
LTE Band 2 HotSpot Front 16QAM 1RB 49offset 18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.08 V/m; Power Drift = 0.063 dB

Peak SAR (extrapolated) = 1.19 W/kg

**SAR(1 g) = 0.710 mW/g; SAR(10 g) = 0.357 mW/g**

Maximum value of SAR (measured) = 0.786 mW/g



0 dB = 0.786mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Band 2 Hotspot Body Left side 16QAM 25RB 13offset 18900ch/Area Scan (41x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.027 mW/g

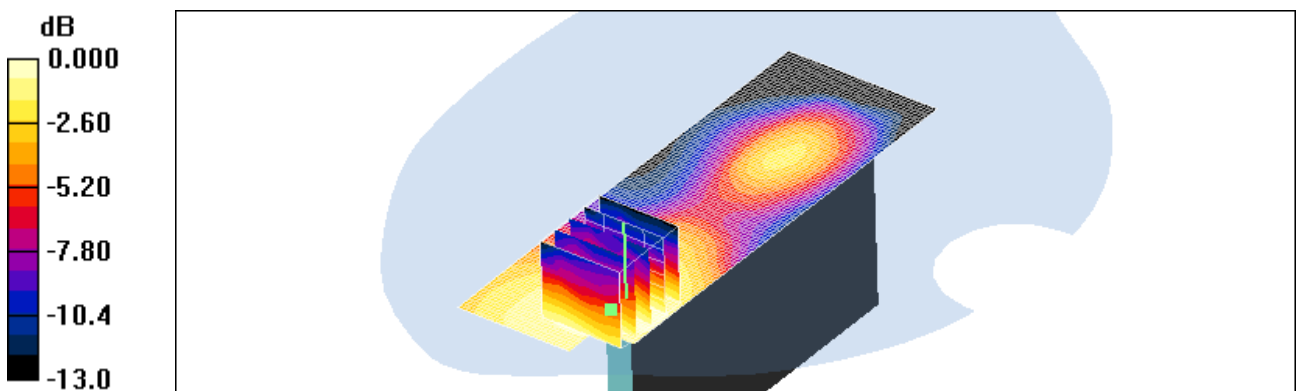
LTE Band 2 Hotspot Body Left side 16QAM 25RB 13offset 18900ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.28 V/m; Power Drift = -0.122 dB

Peak SAR (extrapolated) = 0.038 W/kg

SAR(1 g) = 0.025 mW/g; SAR(10 g) = 0.017 mW/g

Maximum value of SAR (measured) = 0.027 mW/g



0 dB = 0.027mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

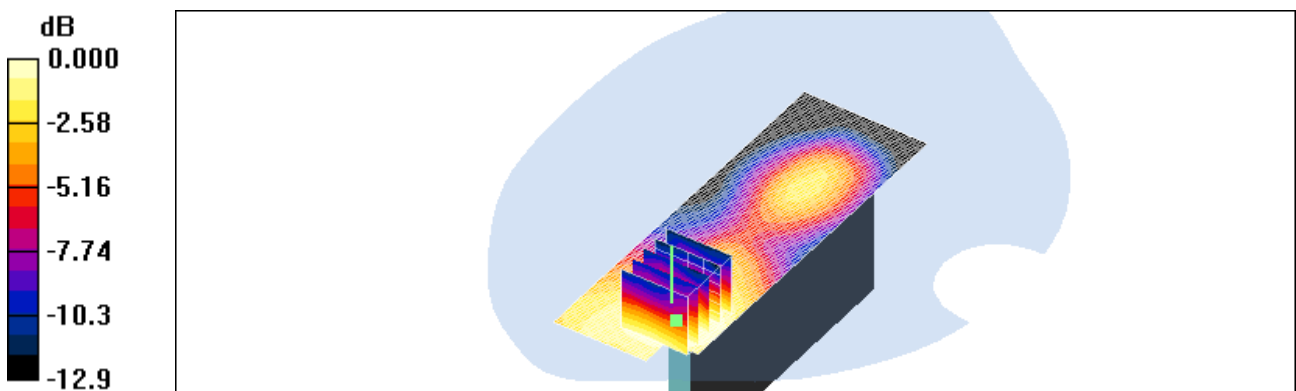
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Band 2 Hotspot Body Left side 16QAM 1RB 0 offset 18900ch/Area Scan (41x121x1): Measurement grid:  
dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.034 mW/g

LTE Band 2 Hotspot Body Left side 16QAM 1RB 0 offset 18900ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid:  
dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.94 V/m; Power Drift = -0.095 dB  
Peak SAR (extrapolated) = 0.045 W/kg  
**SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.022 mW/g**  
Maximum value of SAR (measured) = 0.034 mW/g



0 dB = 0.034mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

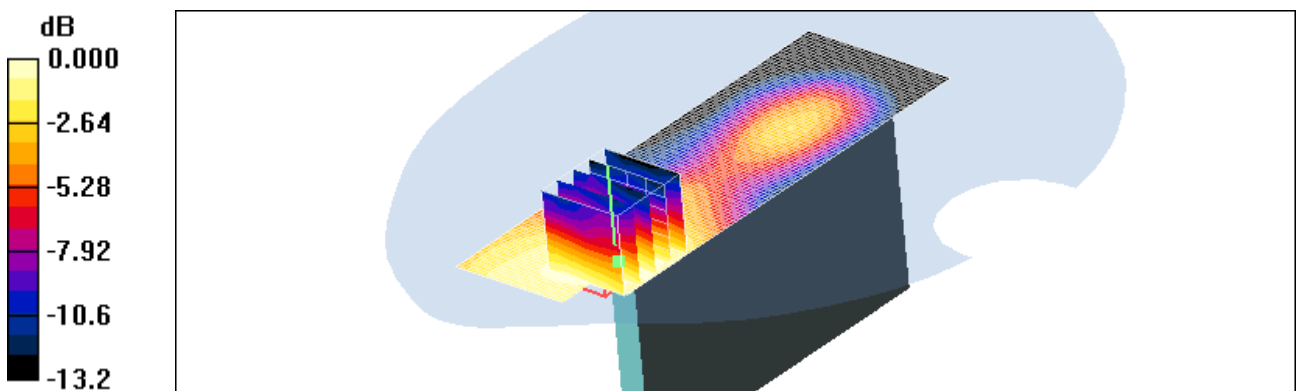
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Band 2 Hotspot Body Left side 16QAM 1RB 49 offset 18900ch/Area Scan (41x121x1): Measurement grid:  
dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.037 mW/g

LTE Band 2 Hotspot Body Left side 16QAM 1RB 49 offset 18900ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid:  
dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.73 V/m; Power Drift = -0.028 dB  
Peak SAR (extrapolated) = 0.052 W/kg  
**SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.023 mW/g**  
Maximum value of SAR (measured) = 0.037 mW/g



0 dB = 0.037mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

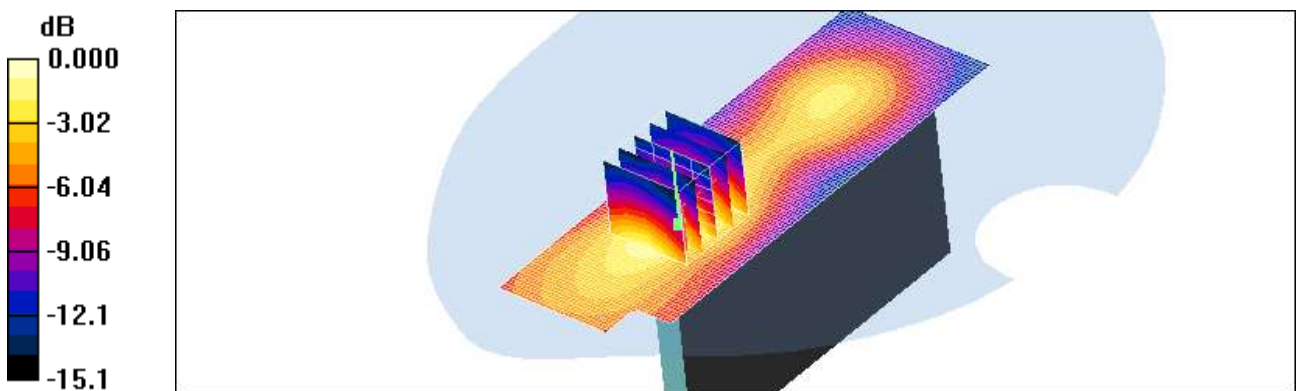
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Band 2 Hotspot Body Right side 16QAM 25RB 13offset 18900ch/Area Scan (41x121x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.073 mW/g

LTE Band 2 Hotspot Body Right side 16QAM 25RB 13offset 18900ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.65 V/m; Power Drift = -0.035 dB  
Peak SAR (extrapolated) = 0.105 W/kg  
SAR(1 g) = 0.068 mW/g; SAR(10 g) = 0.040 mW/g  
Maximum value of SAR (measured) = 0.077 mW/g



0 dB = 0.077mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

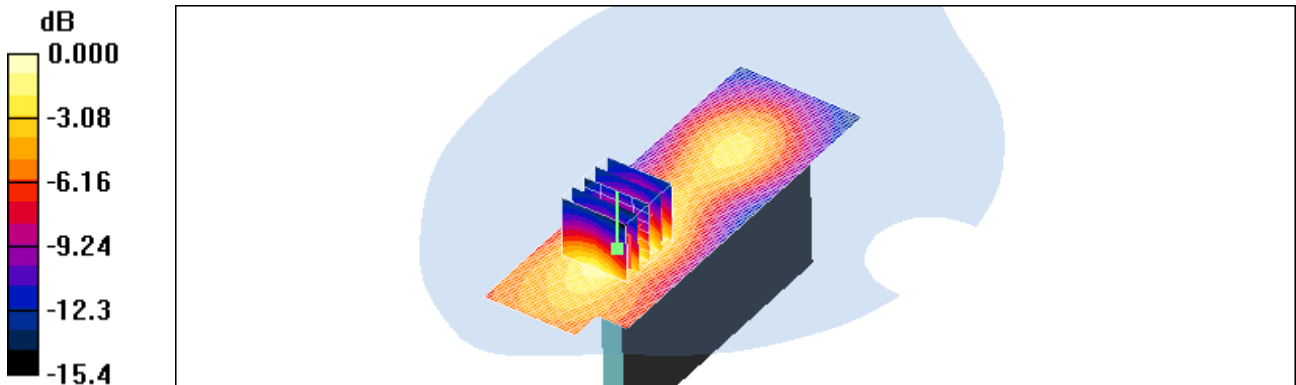
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot Body Right side 16QAM 1RB 0offset 18900ch/Area Scan (41x121x1):** Measurement grid:  
dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.086 mW/g

**LTE Band 2 Hotspot Body Right side 16QAM 1RB 0offset 18900ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  
dx=8mm, dy=8mm, dz=5mm  
Reference Value = 6.48 V/m; Power Drift = -0.031 dB  
Peak SAR (extrapolated) = 0.126 W/kg  
**SAR(1 g) = 0.085 mW/g; SAR(10 g) = 0.050 mW/g**  
Maximum value of SAR (measured) = 0.094 mW/g



0 dB = 0.094mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

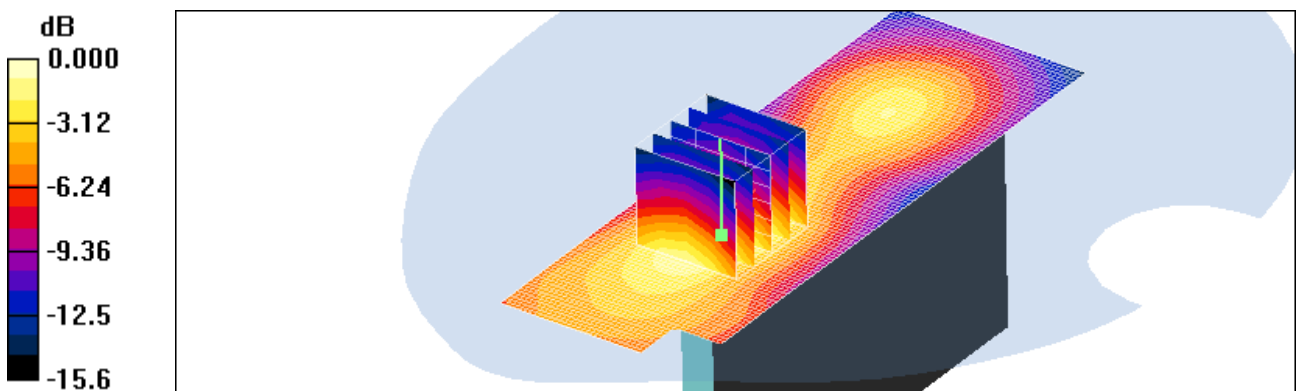
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

LTE Band 2 Hotspot Body Right side 16QAM 1RB 49offset 18900ch/Area Scan (41x121x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.109 mW/g

LTE Band 2 Hotspot Body Right side 16QAM 1RB 49offset 18900ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 6.72 V/m; Power Drift = -0.066 dB  
Peak SAR (extrapolated) = 0.138 W/kg  
SAR(1 g) = 0.093 mW/g; SAR(10 g) = 0.056 mW/g  
Maximum value of SAR (measured) = 0.103 mW/g



0 dB = 0.103mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance: 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 2; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot bottom 16QAM 25RB 13 Offset 18900/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.872 mW/g

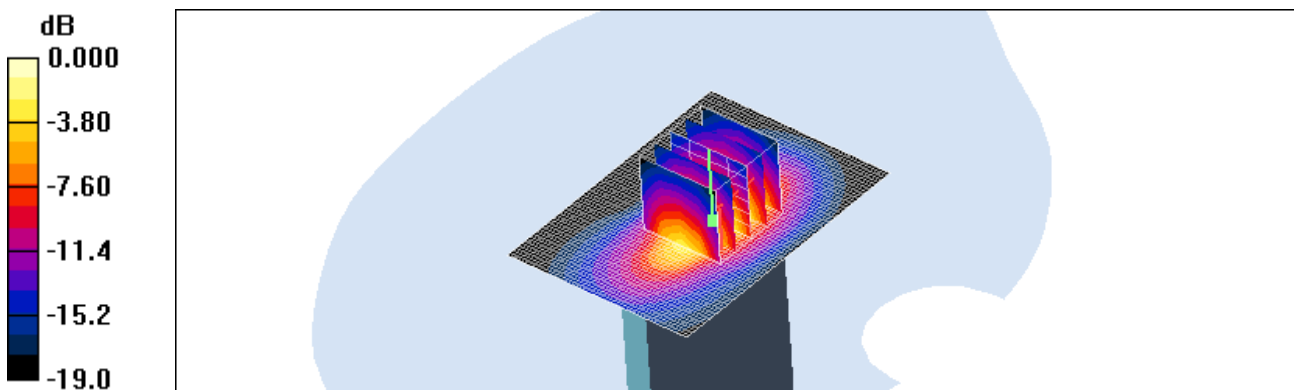
**LTE Band 2 Hotspot bottom 16QAM 25RB 13 Offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.7 V/m; Power Drift = -0.100 dB

Peak SAR (extrapolated) = 1.20 W/kg

**SAR(1 g) = 0.722 mW/g; SAR(10 g) = 0.361 mW/g**

Maximum value of SAR (measured) = 0.815 mW/g



0 dB = 0.815mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient: 21.3 °C  
Temperature:  
Test Date: Jun.19, 2012  
Separation Distance: 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

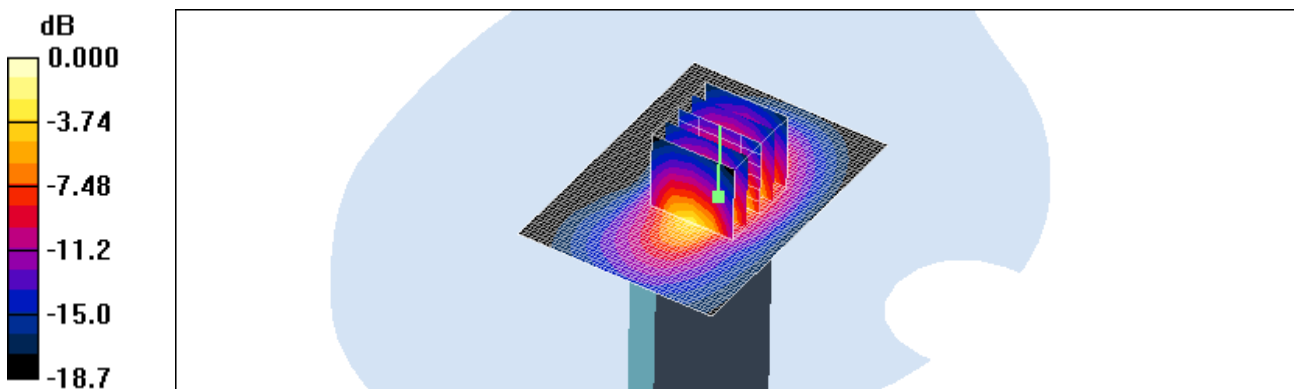
Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot bottom 16QAM 1RB 0 Offset 18900/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.968 mW/g

**LTE Band 2 Hotspot bottom 16QAM 1RB 0 Offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 22.5 V/m; Power Drift = -0.069 dB  
Peak SAR (extrapolated) = 1.29 W/kg  
**SAR(1 g) = 0.800 mW/g; avmeasured) = 0.899 mW/g**



0 dB = 0.899mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

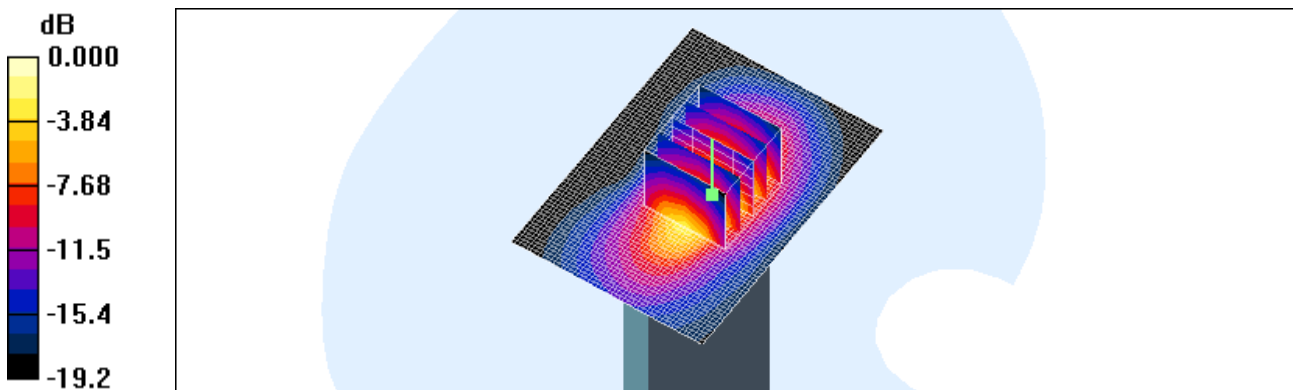
Communication System: LTE Band 2; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot bottom 16QAM 1RB 49 Offset 18900/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.18 mW/g

**LTE Band 2 Hotspot bottom 16QAM 1RB 49 Offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 24.8 V/m; Power Drift = -0.165 dB  
Peak SAR (extrapolated) = 1.58 W/kg  
**SAR(1 g) = 0.932 mW/g; SAR(10 g) = 0.473 mW/g**  
Maximum value of SAR (measured) = 1.05 mW/g



0 dB = 1.05mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance: 2.0 cm

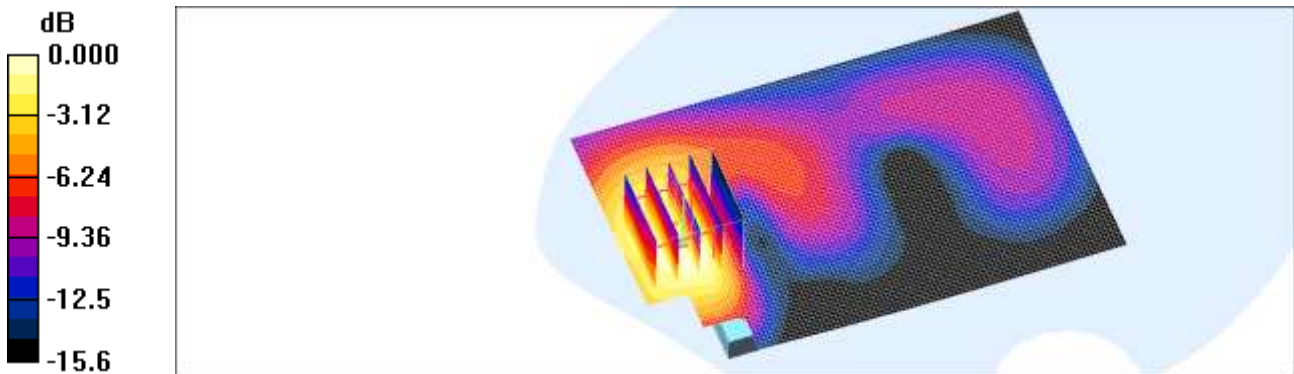
DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 2(10MHz BW); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.48 \text{ mho/m}$ ;  $\epsilon_r = 51.2$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:  
- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19  
- Sensor-Surface: 4mm (Mechanical Surface Detection)  
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27  
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 2 Body Worn Rear QPSK 25RB 13offset 18900/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.178 mW/g

LTE Band 2 Body Worn Rear QPSK 25RB 13offset 18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.31 V/m; Power Drift = -0.088 dB  
Peak SAR (extrapolated) = 0.232 W/kg  
**SAR(1 g) = 0.161 mW/g; SAR(10 g) = 0.100 mW/g**  
Maximum value of SAR (measured) = 0.172 mW/g



0 dB = 0.172mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 2.0 cm

**DUT: P9090; Type: bar; Serial: #1**

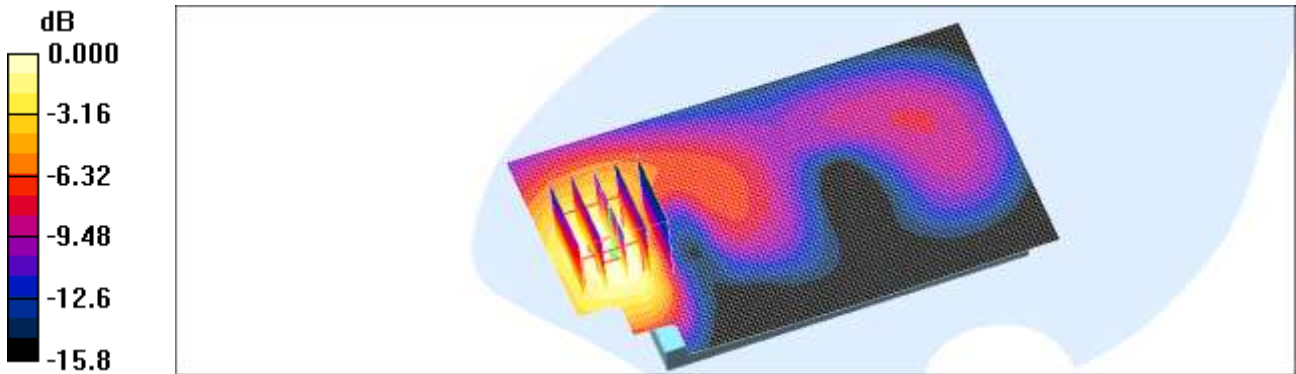
Communication System: LTE Band 2(10MHz BW); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.48 \text{ mho/m}$ ;  $\epsilon_r = 51.2$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**LTE Band 2 Body Worn Rear QPSK 1RB 0 offset 20525/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.224 mW/g

**LTE Band 2 Body Worn Rear QPSK 1RB 0 offset 20525/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.75 V/m; Power Drift = -0.060 dB  
Peak SAR (extrapolated) = 0.302 W/kg  
**SAR(1 g) = 0.209 mW/g; SAR(10 g) = 0.130 mW/g**  
Maximum value of SAR (measured) = 0.222 mW/g



0 dB = 0.222mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 2.0 cm

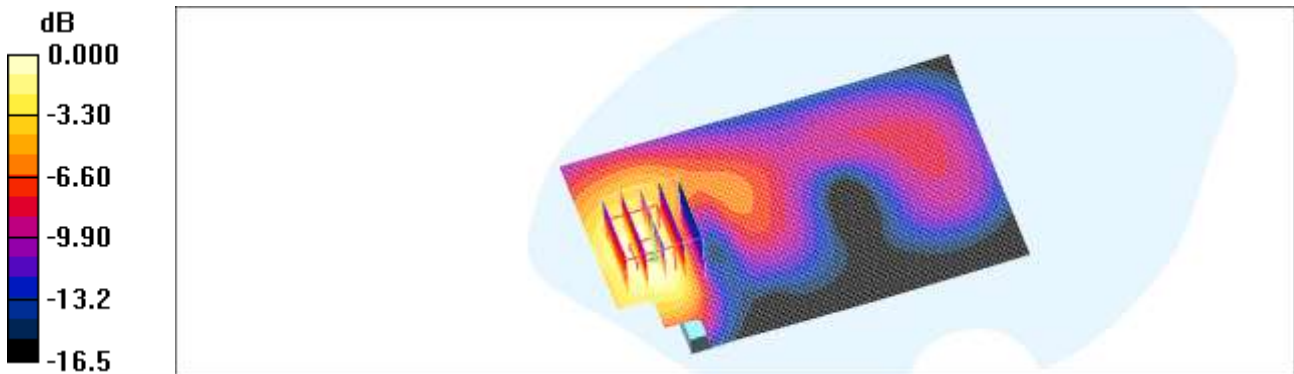
DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 2(10MHz BW); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:  
- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19  
- Sensor-Surface: 4mm (Mechanical Surface Detection)  
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27  
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 2 Body Worn Rear QPSK 1RB 49 offset 18900/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.213 mW/g

LTE Band 2 Body Worn Rear QPSK 1RB 49 offset 18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.61 V/m; Power Drift = -0.150 dB  
Peak SAR (extrapolated) = 0.260 W/kg  
**SAR(1 g) = 0.189 mW/g; SAR(10 g) = 0.117 mW/g**  
Maximum value of SAR (measured) = 0.195 mW/g



0 dB = 0.195mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 2.0 cm

DUT: P9090; Type: bar; Serial: #1

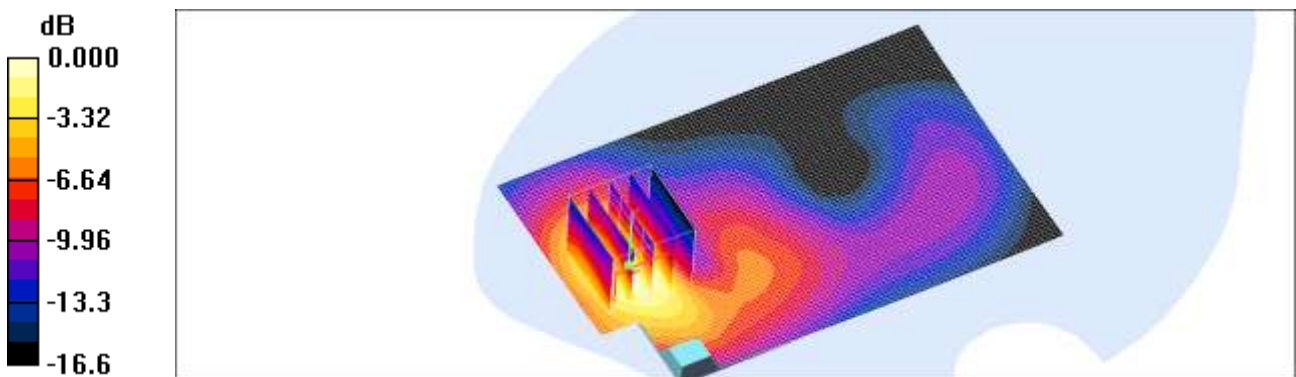
Communication System: LTE Band 2(10MHz BW); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.48 \text{ mho/m}$ ;  $\epsilon_r = 51.2$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 2 Body Worn Front QPSK 25RB 13offset 18900/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.303 mW/g

LTE Band 2 Body Worn Front QPSK 25RB 13offset 18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.26 V/m; Power Drift = 0.063 dB  
Peak SAR (extrapolated) = 0.395 W/kg  
**SAR(1 g) = 0.264 mW/g; SAR(10 g) = 0.155 mW/g**  
Maximum value of SAR (measured) = 0.296 mW/g



0 dB = 0.296mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance: 2.0 cm

DUT: P9090; Type: bar; Serial: #1

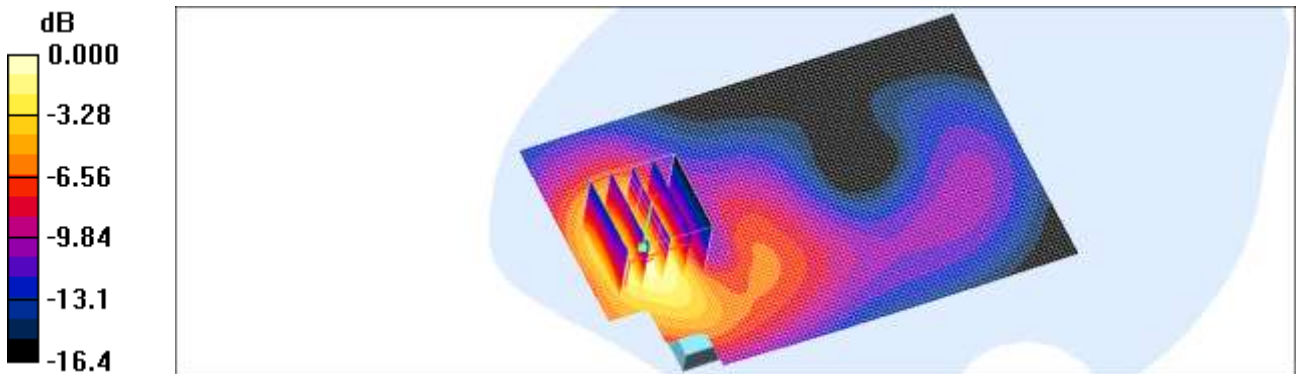
Communication System: LTE Band 2(10MHz BW); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 2 Body Worn Front QPSK 1RB 0offset 18900/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.370 mW/g

LTE Band 2 Body Worn Front QPSK 1RB 0offset 18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.60 V/m; Power Drift = -0.069 dB  
Peak SAR (extrapolated) = 0.489 W/kg  
SAR(1 g) = 0.327 mW/g; SAR(10 g) = 0.191 mW/g  
Maximum value of SAR (measured) = 0.365 mW/g



0 dB = 0.365mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 2.0 cm

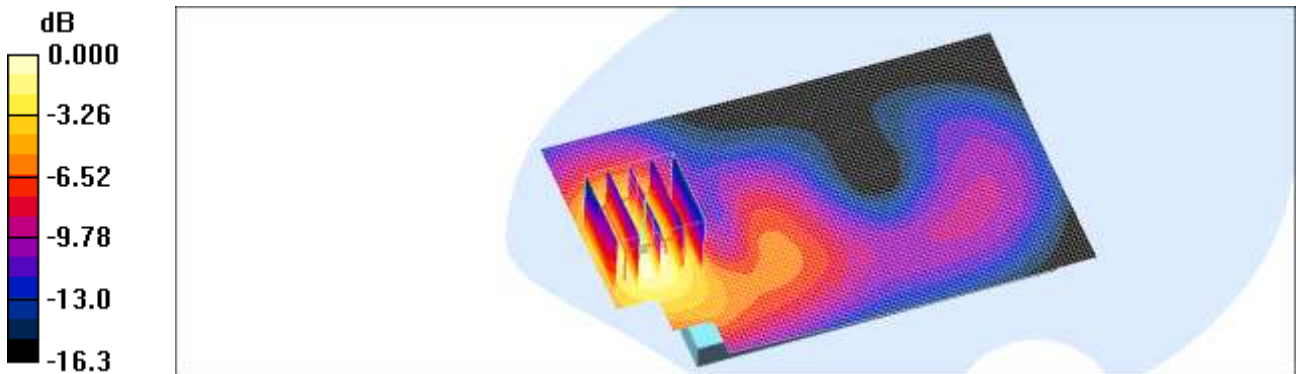
DUT: P9090; Type: bar; Serial: #1

Communication System: LTE Band 2(10MHz BW); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:  
- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19  
- Sensor-Surface: 4mm (Mechanical Surface Detection)  
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27  
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 2 Body Worn Front QPSK 1RB 49offset 18900/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.333 mW/g

LTE Band 2 Body Worn Front QPSK 1RB 49offset 18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 4.19 V/m; Power Drift = 0.096 dB  
Peak SAR (extrapolated) = 0.465 W/kg  
SAR(1 g) = 0.316 mW/g; SAR(10 g) = 0.188 mW/g  
Maximum value of SAR (measured) = 0.337 mW/g



0 dB = 0.337mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance: 2.0 cm

DUT: P9090; Type: bar; Serial: #1

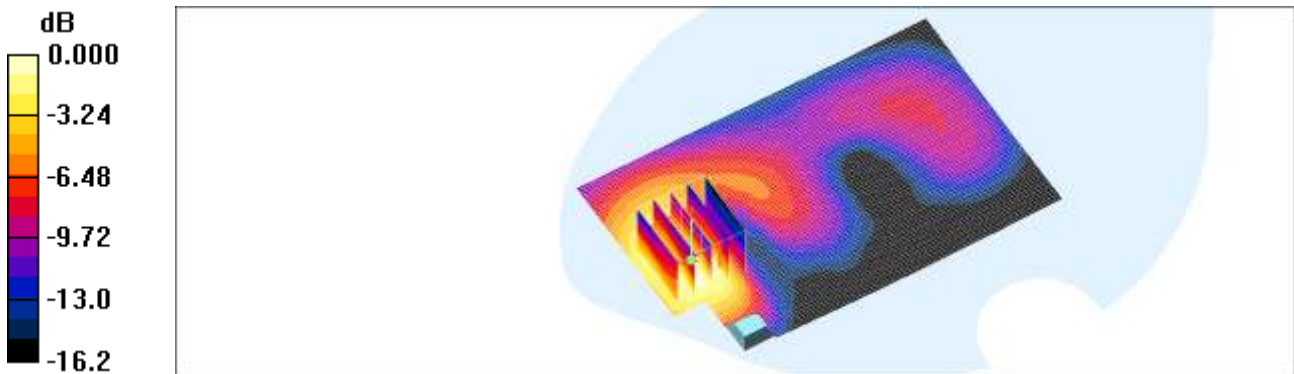
Communication System: LTE Band 2(10MHz BW); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.48 \text{ mho/m}$ ;  $\epsilon_r = 51.2$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 2 Body Worn Rear 16QAM 25RB 13offset 18900/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.141 mW/g

LTE Band 2 Body Worn Rear 16QAM 25RB 13offset 18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 2.90 V/m; Power Drift = 0.040 dB  
Peak SAR (extrapolated) = 0.183 W/kg  
SAR(1 g) = 0.126 mW/g; SAR(10 g) = 0.078 mW/g  
Maximum value of SAR (measured) = 0.136 mW/g



0 dB = 0.136mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance: 2.0 cm

DUT: P9090; Type: bar; Serial: #1

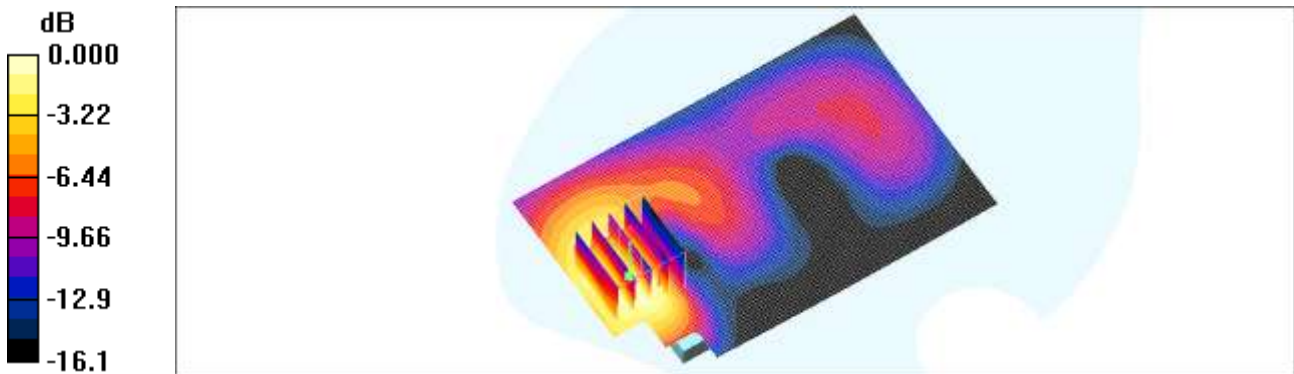
Communication System: LTE Band 2(10MHz BW); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.48 \text{ mho/m}$ ;  $\epsilon_r = 51.2$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 2 Body Worn Rear 16QAM 1 RB 0 offset 18900/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.167 mW/g

LTE Band 2 Body Worn Rear 16QAM 1 RB 0 offset 18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.11 V/m; Power Drift = 0.017 dB  
Peak SAR (extrapolated) = 0.216 W/kg  
SAR(1 g) = 0.152 mW/g; SAR(10 g) = 0.094 mW/g  
Maximum value of SAR (measured) = 0.162 mW/g



0 dB = 0.162mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance: 2.0 cm

DUT: P9090; Type: bar; Serial: #1

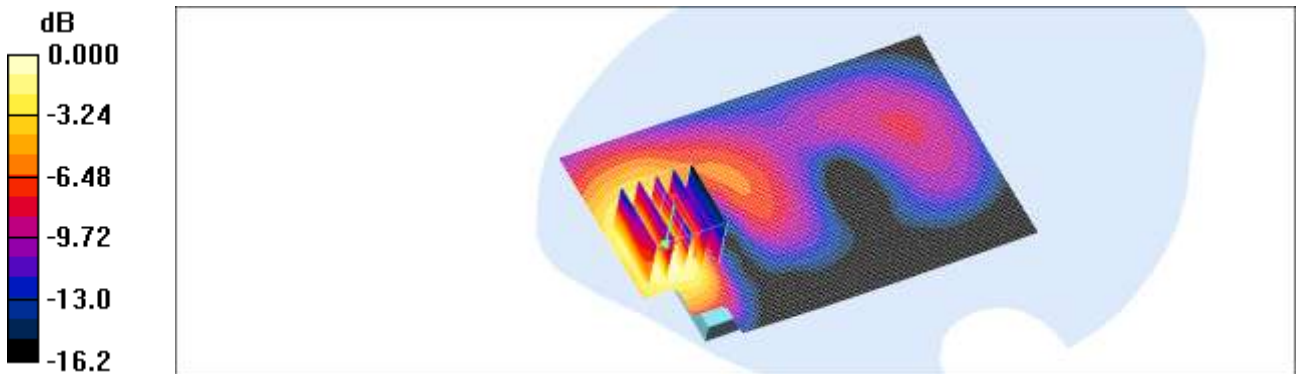
Communication System: LTE Band 2(10MHz BW); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.48 \text{ mho/m}$ ;  $\epsilon_r = 51.2$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 2 Body Worn Rear 16QAM 1RB 49offset 19800/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.186 mW/g

LTE Band 2 Body Worn Rear 16QAM 1RB 49offset 19800/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.31 V/m; Power Drift = -0.095 dB  
Peak SAR (extrapolated) = 0.246 W/kg  
SAR(1 g) = 0.170 mW/g; SAR(10 g) = 0.105 mW/g  
Maximum value of SAR (measured) = 0.184 mW/g



0 dB = 0.184mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 2.0 cm

DUT: P9090; Type: bar; Serial: #1

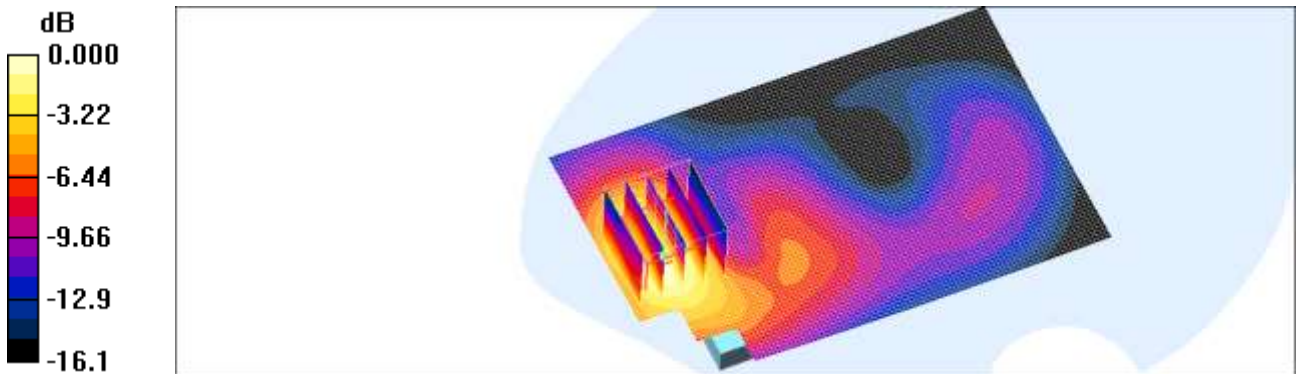
Communication System: LTE Band 2(10MHz BW); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.48 \text{ mho/m}$ ;  $\epsilon_r = 51.2$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 2 Body Worn Front 16QAM 25RB 13offset 18900/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.200 mW/g

LTE Band 2 Body Worn Front 16QAM 25RB 13offset 18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.29 V/m; Power Drift = -0.135 dB  
Peak SAR (extrapolated) = 0.278 W/kg  
**SAR(1 g) = 0.190 mW/g; SAR(10 g) = 0.113 mW/g**  
Maximum value of SAR (measured) = 0.207 mW/g



0 dB = 0.207mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance: 2.0 cm

DUT: P9090; Type: bar; Serial: #1

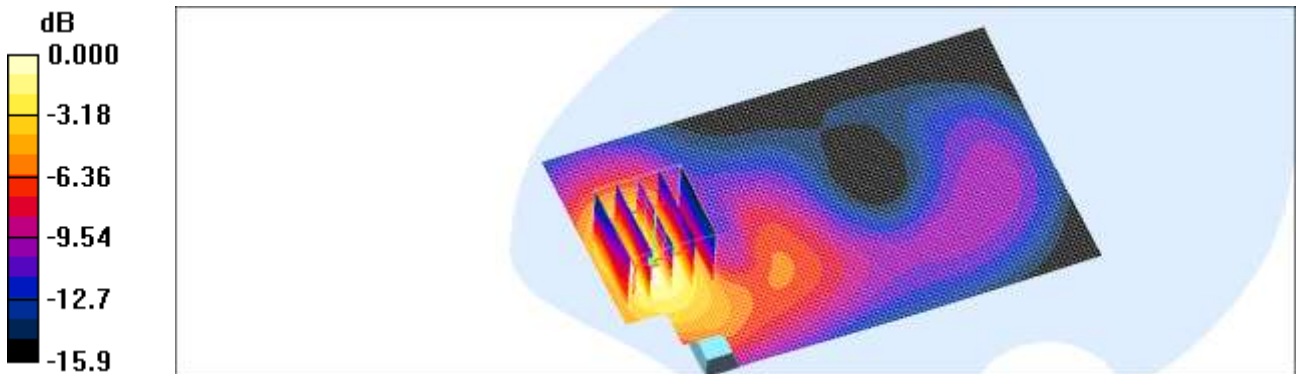
Communication System: LTE Band 2(10MHz BW); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.48 \text{ mho/m}$ ;  $\epsilon_r = 51.2$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

LTE Band 2 Body Worn Front 16QAM 1RB Offset 18900/Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.236 mW/g

LTE Band 2 Body Worn Front 16QAM 1RB Offset 18900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 3.57 V/m; Power Drift = -0.003 dB  
Peak SAR (extrapolated) = 0.355 W/kg  
**SAR(1 g) = 0.234 mW/g; SAR(10 g) = 0.138 mW/g**  
Maximum value of SAR (measured) = 0.257 mW/g



0 dB = 0.257mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012  
Separation Distance 2.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 2(10MHz BW); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**LTE Band 2 Body Worn Front 16QAM 1RB 49offset 18900/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.270 mW/g

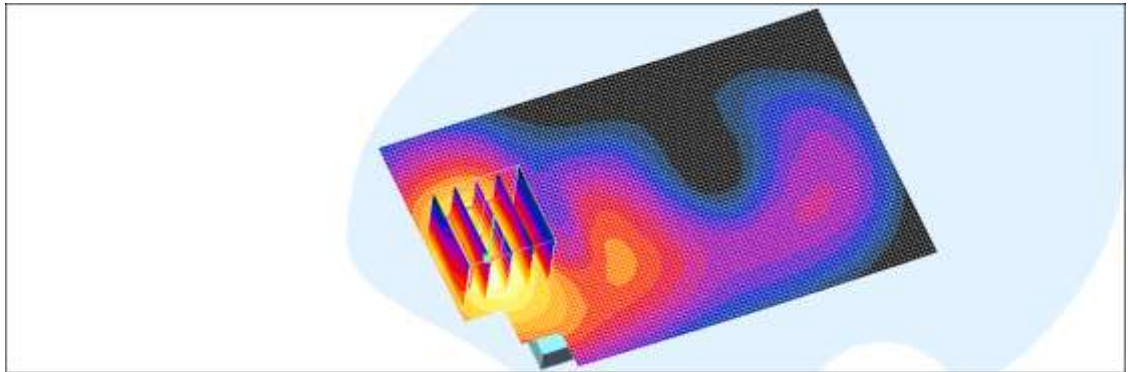
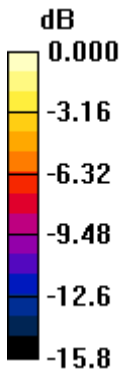
**LTE Band 2 Body Worn Front 16QAM 1RB 49offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.73 V/m; Power Drift = 0.132 dB

Peak SAR (extrapolated) = 0.375 W/kg

**SAR(1 g) = 0.254 mW/g; SAR(10 g) = 0.152 mW/g**

Maximum value of SAR (measured) = 0.273 mW/g



0 dB = 0.273mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.07, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: 2450MHz FCC; Frequency: 2437 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 51.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.01, 4.01, 4.01); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**802.11b Hotspot Body Rear 6ch 1Mbps/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.300 mW/g

**802.11b Hotspot Body Rear 6ch 1Mbps/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

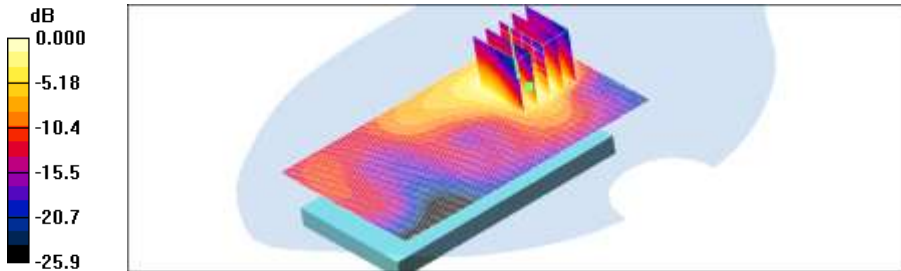
Reference Value = 7.37 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 0.675 W/kg

**SAR(1 g) = 0.288 mW/g; SAR(10 g) = 0.146 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.299 mW/g



0 dB = 0.299mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.07, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: 2450MHz FCC; Frequency: 2437 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 51.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.01, 4.01, 4.01); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**802.11b Hotspot Body Front 6ch 1Mbps/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.105 mW/g

**802.11b Hotspot Body Front 6ch 1Mbps /Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

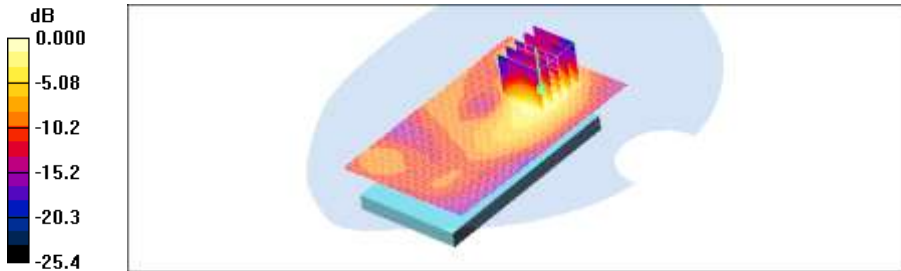
Reference Value = 5.91 V/m; Power Drift = -0.073 dB

Peak SAR (extrapolated) = 0.253 W/kg

**SAR(1 g) = 0.101 mW/g; SAR(10 g) = 0.051 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.103 mW/g



0 dB = 0.103mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.07, 2012  
Separation Distance 1.0 cm

**DUT: P9090(side); Type: bar; Serial: #1**

Communication System: 2450MHz FCC; Frequency: 2437 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 51.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.01, 4.01, 4.01); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phamtom ; Type: SAM

**802.11b Hotspot Body Right 6ch 1Mbps /Area Scan (41x101x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.045 mW/g

**802.11b Hotspot Body Right 6ch 1Mbps /Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

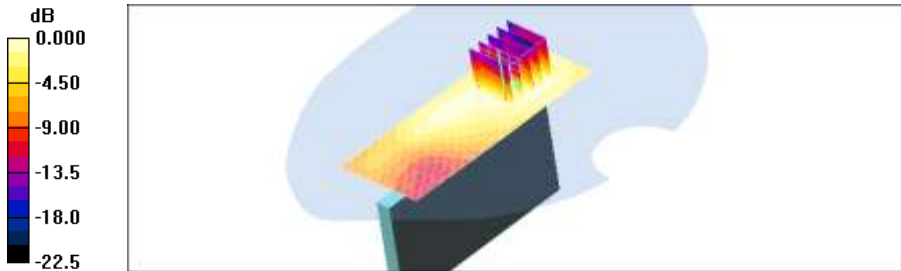
Reference Value = 4.95 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 0.091 W/kg

**SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.024 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.044 mW/g



0 dB = 0.044mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.07, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: 2450MHz FCC; Frequency: 2437 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 51.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.01, 4.01, 4.01); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**802.11b Hotspot Body Top 6ch 1Mbps/Area Scan (41x61x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.267 mW/g

**802.11b Hotspot Body Top 6ch 1Mbps/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

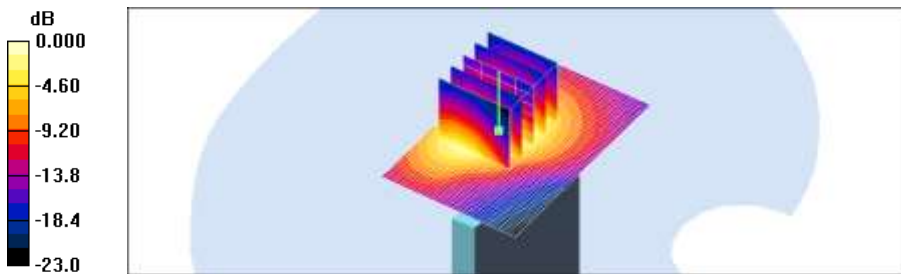
Reference Value = 9.64 V/m; Power Drift = 0.063 dB

Peak SAR (extrapolated) = 0.610 W/kg

**SAR(1 g) = 0.243 mW/g; SAR(10 g) = 0.117 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.250 mW/g



0 dB = 0.250mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.3 °C  
Ambient Temperature: 21.5 °C  
Test Date: Jun.21, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: WIFI 5GHz; Frequency: 5240 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 5240$  MHz;  $\sigma = 5.24$  mho/m;  $\epsilon_r = 47.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(4.1, 4.1, 4.1); Calibrated: 2011-07-25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 835/900 MHz; Type: SAM

**WIFI 5GHz Body Rear 48ch 6Mbps/Area Scan (101x151x1):** Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.070 mW/g

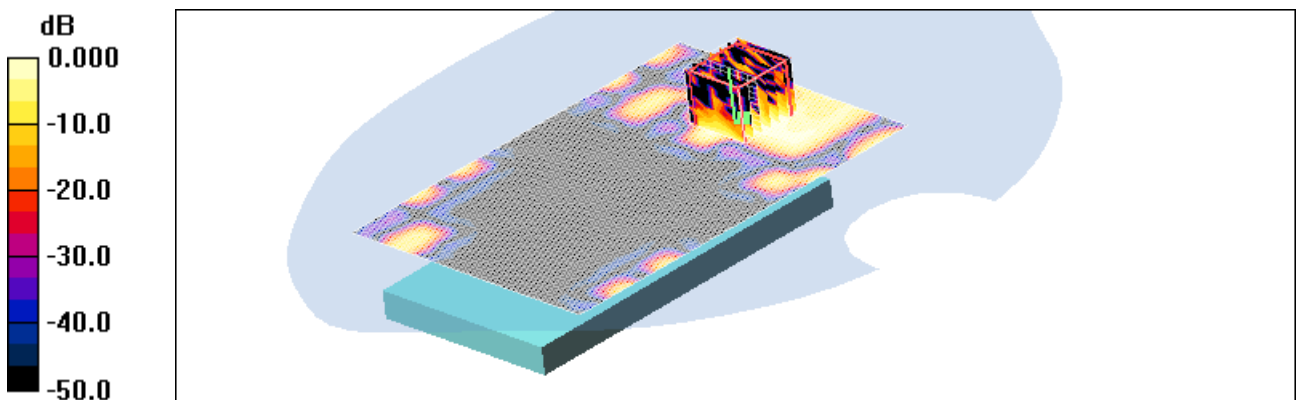
**WIFI 5GHz Body Rear 48ch 6Mbps/Zoom Scan (7x7x11)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.671 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.108 W/kg

**SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.0068 mW/g**

Maximum value of SAR (measured) = 0.045 mW/g



0 dB = 0.045mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.3 °C  
Ambient Temperature: 21.5 °C  
Test Date: Jun.21, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: WIFI 5GHz; Frequency: 5240 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 5240$  MHz;  $\sigma = 5.24$  mho/m;  $\epsilon_r = 47.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(4.1, 4.1, 4.1); Calibrated: 2011-07-25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 835/900 MHz; Type: SAM

**WIFI 5GHz Body Front 48ch 6Mbps/Area Scan (101x151x1):** Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.034 mW/g

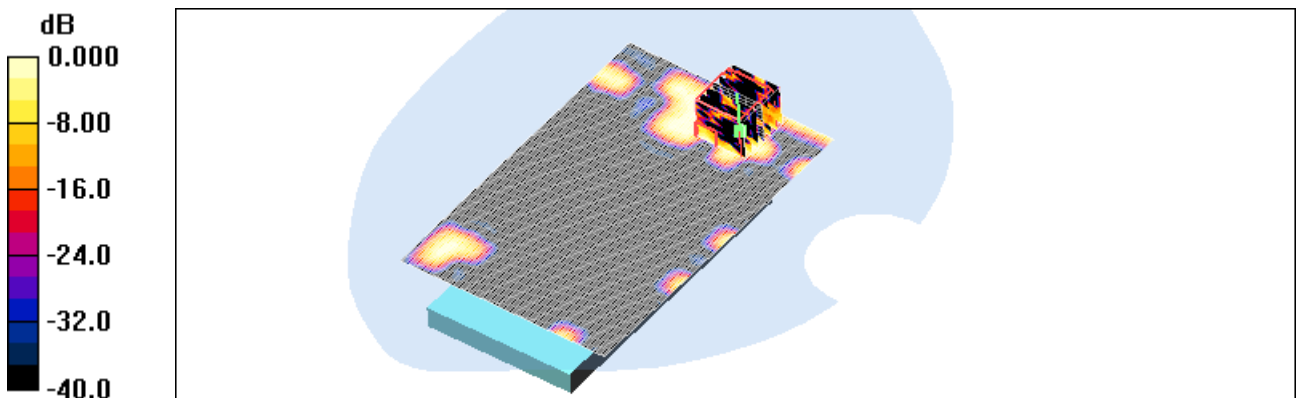
**WIFI 5GHz Body Front 48ch 6Mbps/Zoom Scan (7x7x11)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.000 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.120 W/kg

**SAR(1 g) = 0.00762 mW/g; SAR(10 g) = 0.00185 mW/g**

Maximum value of SAR (measured) = 0.019 mW/g



0 dB = 0.019mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.3 °C  
Ambient Temperature: 21.5 °C  
Test Date: Jun.21, 2012  
Separation Distance 1.0 cm

**DUT: P9090; Type: bar; Serial: #1**

Communication System: WIFI 5GHz; Frequency: 5260 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 5260$  MHz;  $\sigma = 5.27$  mho/m;  $\epsilon_r = 47.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(3.83, 3.83, 3.83); Calibrated: 2011-07-25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 835/900 MHz; Type: SAM

**WIFI 5GHz Body Rear 52ch 6Mbps/Area Scan (101x151x1):** Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.086 mW/g

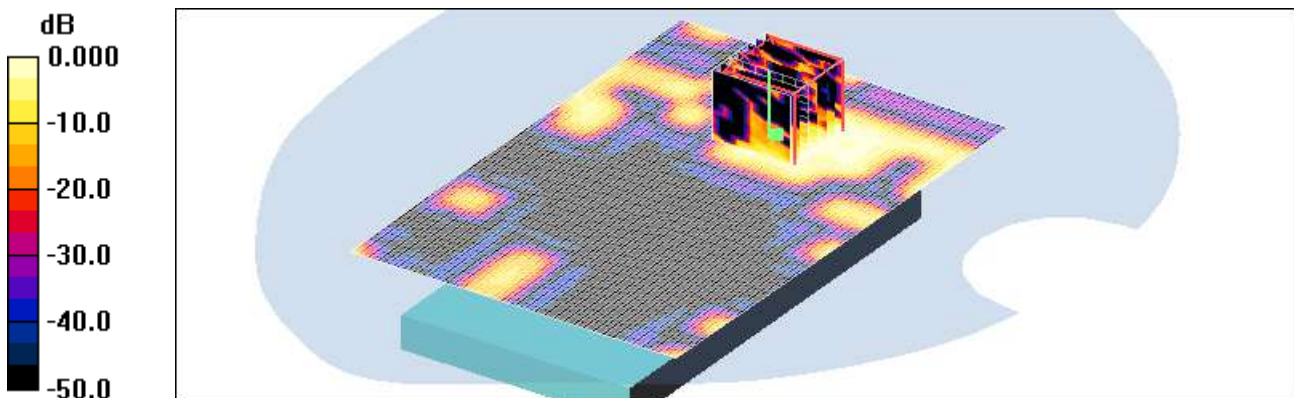
**WIFI 5GHz Body Rear 52ch 6Mbps/Zoom Scan (7x7x11)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.804 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.131 W/kg

**SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00579 mW/g**

Maximum value of SAR (measured) = 0.043 mW/g



0 dB = 0.043mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.3 °C  
Ambient Temperature: 21.5 °C  
Test Date: Jun.21, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: WIFI 5GHz; Frequency: 5260 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 5260$  MHz;  $\sigma = 5.27$  mho/m;  $\epsilon_r = 47.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(3.83, 3.83, 3.83); Calibrated: 2011-07-25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 835/900 MHz; Type: SAM

WIFI 5GHz Body Front 52ch 6Mbps/Area Scan (101x151x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.052 mW/g

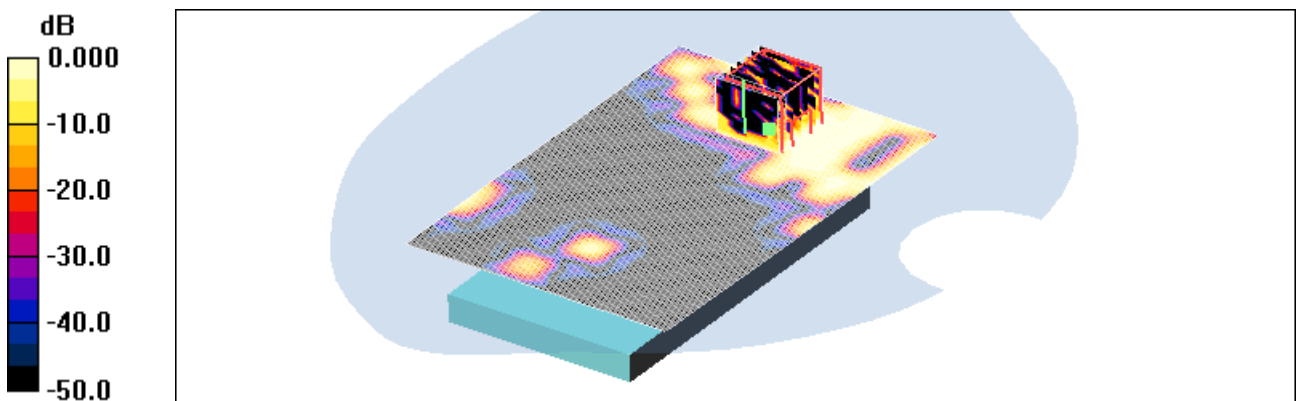
WIFI 5GHz Body Front 52ch 6Mbps/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.077 V/m; Power Drift = 0.038 dB

Peak SAR (extrapolated) = 0.134 W/kg

SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00411 mW/g

Maximum value of SAR (measured) = 0.018 mW/g



0 dB = 0.018mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.3 °C  
Ambient Temperature: 21.5 °C  
Test Date: Jun.21, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: WIFI 5GHz; Frequency: 5620 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 5620$  MHz;  $\sigma = 5.77$  mho/m;  $\epsilon_r = 46.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(3.6, 3.6, 3.6); Calibrated: 2011-07-25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 835/900 MHz; Type: SAM

WIFI 5GHz Body Rear 124ch 6Mbps/Area Scan (101x151x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.084 mW/g

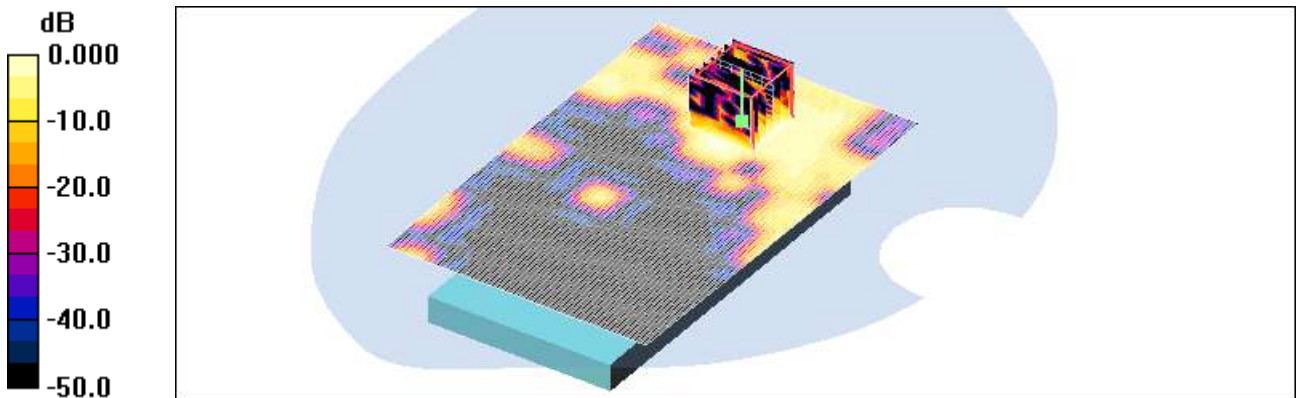
WIFI 5GHz Body Rear 124ch 6Mbps/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.810 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.132 W/kg

**SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.00987 mW/g**

Maximum value of SAR (measured) = 0.073 mW/g



0 dB = 0.073mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.3 °C  
Ambient Temperature: 21.5 °C  
Test Date: Jun.21, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: WIFI 5GHz; Frequency: 5620 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 5620$  MHz;  $\sigma = 5.77$  mho/m;  $\epsilon_r = 46.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(3.6, 3.6, 3.6); Calibrated: 2011-07-25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 835/900 MHz; Type: SAM

WIFI 5GHz Body Front 124ch 6Mbps/Area Scan (101x151x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.052 mW/g

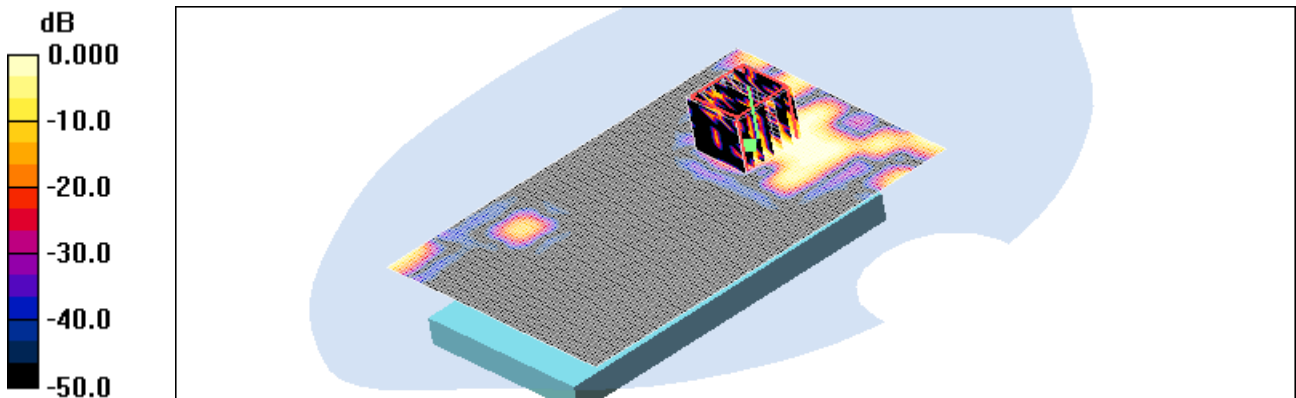
WIFI 5GHz Body Front 124ch 6Mbps/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.349 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.151 W/kg

**SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00355 mW/g**

Maximum value of SAR (measured) = 0.029 mW/g



0 dB = 0.029mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.3 °C  
Ambient Temperature: 21.5 °C  
Test Date: Jun.21, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: WIFI 5GHz; Frequency: 5785 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 5785$  MHz;  $\sigma = 6.07$  mho/m;  $\epsilon_r = 46.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(3.75, 3.75, 3.75); Calibrated: 2011-07-25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 835/900 MHz; Type: SAM

WIFI 5GHz Body Rear 157ch 6Mbps/Area Scan (101x151x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.133 mW/g

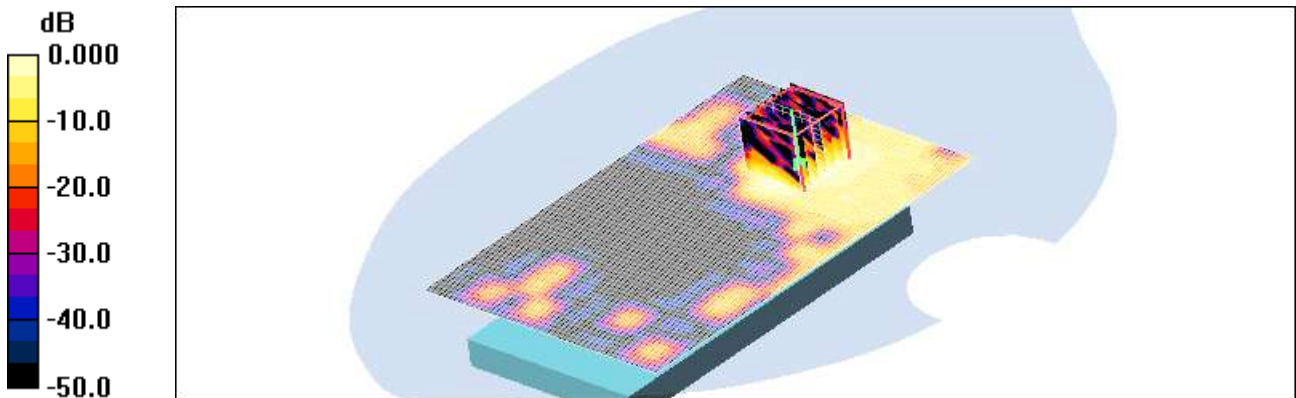
WIFI 5GHz Body Rear 157ch 6Mbps/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.45 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 0.239 W/kg

**SAR(1 g) = 0.061 mW/g; SAR(10 g) = 0.019 mW/g**

Maximum value of SAR (measured) = 0.129 mW/g



0 dB = 0.129mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.3 °C  
Ambient Temperature: 21.5 °C  
Test Date: Jun.21, 2012  
Separation Distance 1.0 cm

DUT: P9090; Type: bar; Serial: #1

Communication System: WIFI 5GHz; Frequency: 5785 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 5785$  MHz;  $\sigma = 6.07$  mho/m;  $\epsilon_r = 46.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(3.75, 3.75, 3.75); Calibrated: 2011-07-25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 835/900 MHz; Type: SAM

WIFI 5GHz Body Front 157ch 6Mbps/Area Scan (101x151x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.067 mW/g

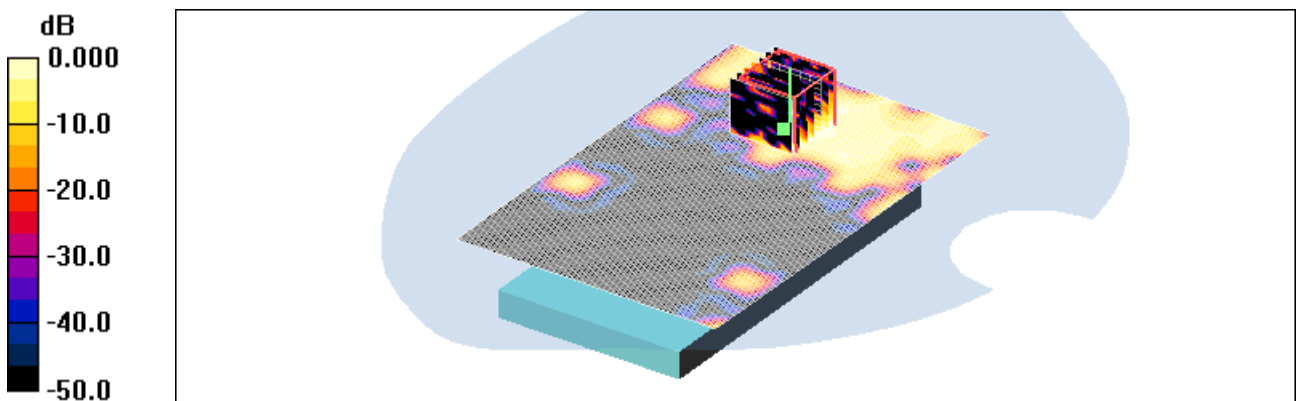
WIFI 5GHz Body Front 157ch 6Mbps/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.436 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 0.150 W/kg

SAR(1 g) = 0.024 mW/g; SAR(10 g) = 0.00755 mW/g

Maximum value of SAR (measured) = 0.061 mW/g



0 dB = 0.061mW/g

Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Jun.04, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.885$  mho/m;  $\epsilon_r = 43.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(8.93, 8.93, 8.93); Calibrated: 2011-07-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 835/900 MHz; Type: SAM

**Left touch 190/Area Scan (71x101x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.278 mW/g

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

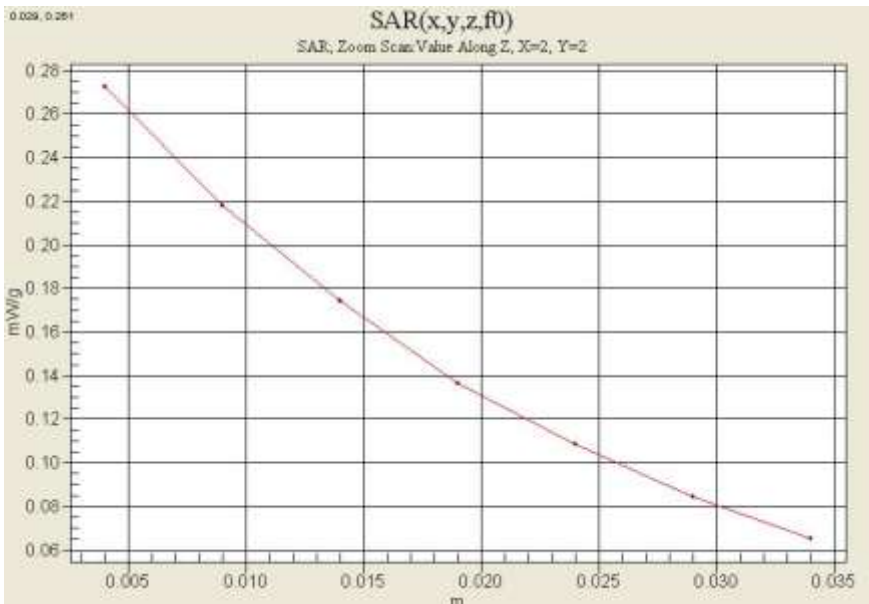
Reference Value = 17.3 V/m; Power Drift = -0.188 dB

Peak SAR (extrapolated) = 0.323 W/kg

**SAR(1 g) = 0.259 mW/g; SAR(10 g) = 0.197 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.273 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Jun.04, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.14, 9.14, 9.14); Calibrated: 2011-07-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Hotspot Body left side GPRS 2Tx 190/Area Scan (51x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.744 mW/g

**Hotspot Body left side GPRS 2Tx 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.1 V/m; Power Drift = -0.084 dB

Peak SAR (extrapolated) = 0.971 W/kg

**SAR(1 g) = 0.674 mW/g; SAR(10 g) = 0.452 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.729 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Jun.05, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.38$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.6, 7.6, 7.6); Calibrated: 2011-07-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right touch 661/Area Scan (71x101x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.181 mW/g

**Right touch 661/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 5.19 V/m; Power Drift = -0.088 dB  
Peak SAR (extrapolated) = 0.265 W/kg  
**SAR(1 g) = 0.163 mW/g; SAR(10 g) = 0.097 mW/g**  
Maximum value of SAR (measured) = 0.179 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Jun.05, 2012

**DUT: P9090; Type: bar; Serial: #1**

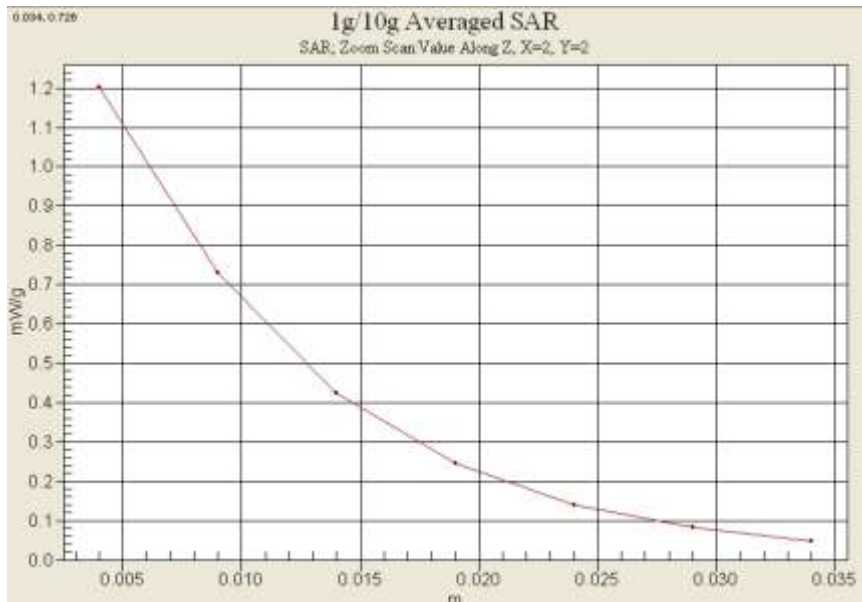
Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4.15  
Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**Hotspot Body bottom GPRS 2Tx 810/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.42 mW/g

**Hotspot Body bottom GPRS 2Tx 810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 26.7 V/m; Power Drift = -0.033 dB  
Peak SAR (extrapolated) = 1.74 W/kg  
**SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.512 mW/g**  
Maximum value of SAR (measured) = 1.20 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Jun.04, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.885$  mho/m;  $\epsilon_r = 43.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(8.93, 8.93, 8.93); Calibrated: 2011-07-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 835/900 MHz; Type: SAM

**Left touch 4183/Area Scan (71x101x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.275 mW/g

**Left touch 4183/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

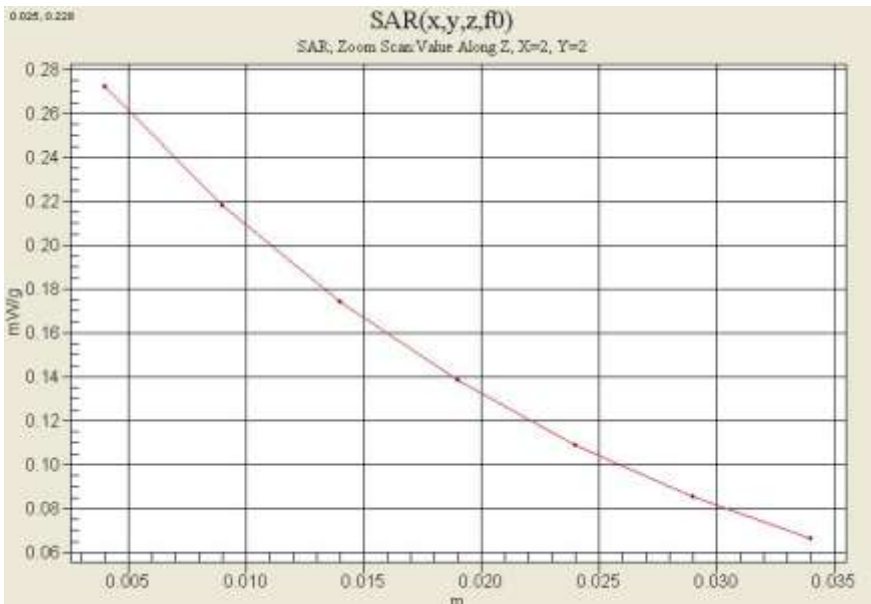
Reference Value = 16.9 V/m; Power Drift = 0.068 dB

Peak SAR (extrapolated) = 0.322 W/kg

**SAR(1 g) = 0.259 mW/g; SAR(10 g) = 0.197 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.272 mW/g





Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Jun.04, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: WCDMA850; Frequency: 836.6 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(9.14, 9.14, 9.14); Calibrated: 2011-07-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Hotspot Body Left side 4183/Area Scan (51x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.468 mW/g

**Hotspot Body Left side 4183/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.7 V/m; Power Drift = -0.124 dB

Peak SAR (extrapolated) = 0.633 W/kg

**SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.296 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.463 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Jun.05, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: WCDMA1900; Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.38$  mho/m;  $\epsilon_r = 40$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASYS4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(7.6, 7.6, 7.6); Calibrated: 2011-07-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right touch 9400/Area Scan (71x101x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.392 mW/g

**Right touch 9400/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 7.39 V/m; Power Drift = -0.105 dB  
Peak SAR (extrapolated) = 0.582 W/kg  
**SAR(1 g) = 0.353 mW/g; SAR(10 g) = 0.207 mW/g**  
Maximum value of SAR (measured) = 0.395 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Jun.05, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: WCDMA1900; Frequency: 1907.6 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**Hotspot Body bottom 9538/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 1.52 mW/g

**Hotspot Body bottom 9538/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

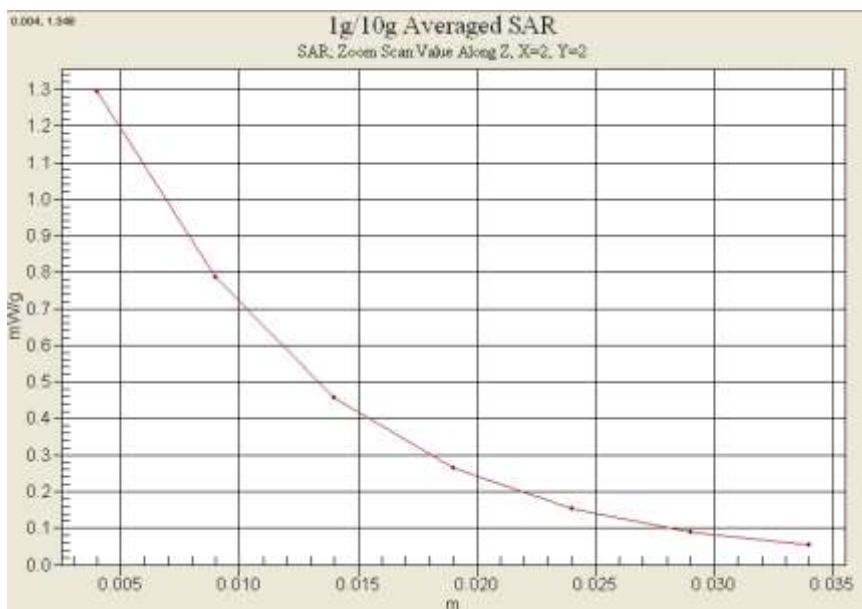
Reference Value = 30.0 V/m; Power Drift = -0.083 dB

Peak SAR (extrapolated) = 1.91 W/kg

**SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.576 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.30 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.07, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: 2450MHz FCC; Frequency: 2437 MHz;Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.84$  mho/m;  $\epsilon_r = 38.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.52, 4.52, 4.52); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**Right tilt 6 1Mbps/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.337 mW/g

**Right tilt 6 1Mbps /Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

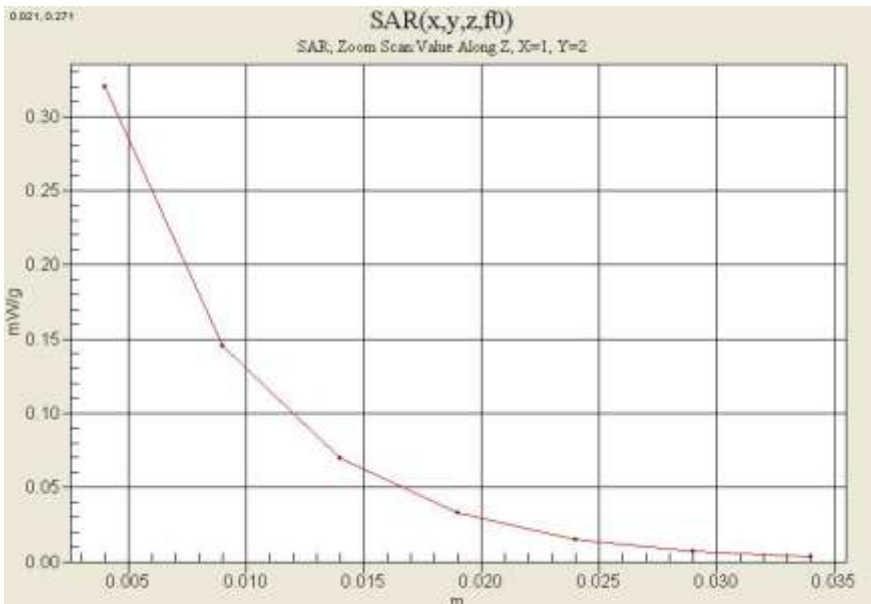
Reference Value = 13.6 V/m; Power Drift = -0.052 dB

Peak SAR (extrapolated) = 0.704 W/kg

**SAR(1 g) = 0.302 mW/g; SAR(10 g) = 0.141 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.320 mW/g



Test Laboratory: HCT CO., LTD  
 EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
 Liquid Temperature: 21.1 °C  
 Ambient Temperature: 21.3 °C  
 Test Date: Jun.07, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: 2450MHz FCC; Frequency: 2437 MHz;Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 51.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

- DASY4 Configuration:
- Probe: ET3DV6 - SN1609; ConvF(4.01, 4.01, 4.01); Calibrated: 2012-03-19
  - Sensor-Surface: 4mm (Mechanical Surface Detection)
  - Electronics: DAE4 Sn648; Calibrated: 2012-04-27
  - Phantom: 835/900 Phamtom ; Type: SAM

**802.11b Hotspot Body Rear 6ch 1Mbps/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.300 mW/g

**802.11b Hotspot Body Rear 6ch 1Mbps/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

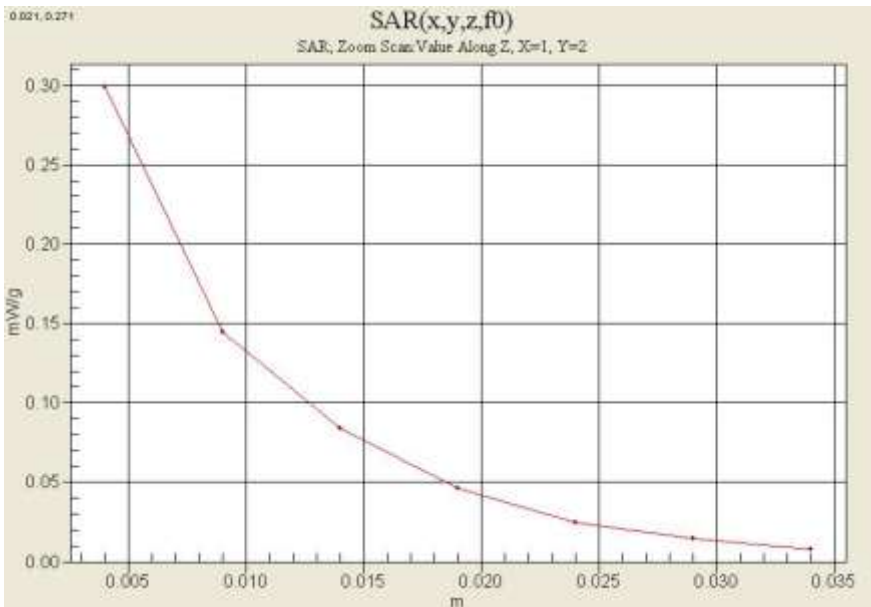
Reference Value = 7.37 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 0.675 W/kg

**SAR(1 g) = 0.288 mW/g; SAR(10 g) = 0.146 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

aximum value of SAR (measured) = 0.299 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.3 °C  
Ambient Temperature: 21.5 °C  
Test Date: Jun.20, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: WIFI 5GHz; Frequency: 5785 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 5785$  MHz;  $\sigma = 6.07$  mho/m;  $\epsilon_r = 46.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DAS4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DAS4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(3.75, 3.75, 3.75); Calibrated: 2011-07-25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 835/900 MHz; Type: SAM

**Right tilt 802.11a 157ch 6Mbps/Area Scan (91x151x1):** Measurement grid: dx=10mm, dy=10mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.441 mW/g

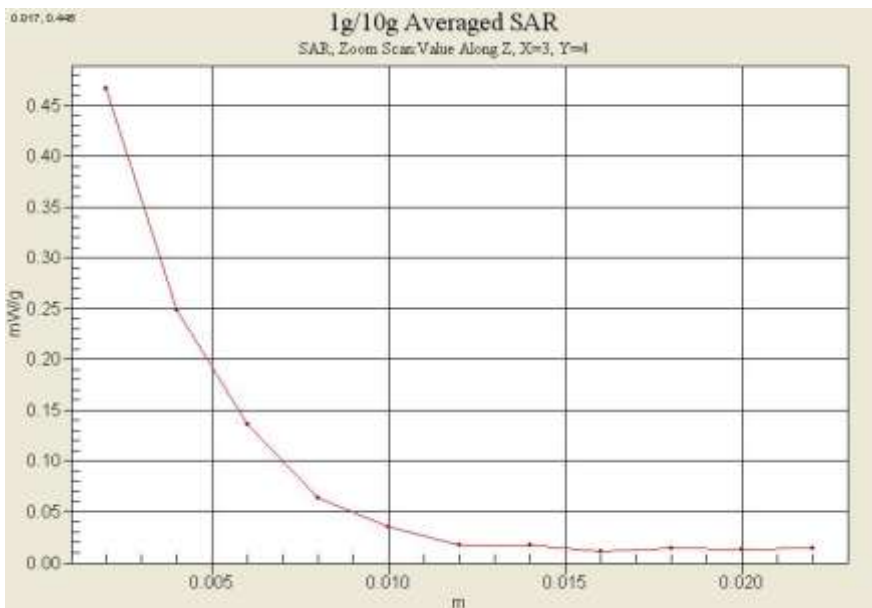
**Right tilt 802.11a 157ch 6Mbps/Zoom Scan (7x7x11)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 7.95 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 1.06 W/kg

**SAR(1 g) = 0.223 mW/g; SAR(10 g) = 0.064 mW/g**

Maximum value of SAR (measured) = 0.467 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.3 °C  
Ambient Temperature: 21.5 °C  
Test Date: Jun.21, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: WIFI 5GHz; Frequency: 5785 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 5785$  MHz;  $\sigma = 6.07$  mho/m;  $\epsilon_r = 46.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(3.75, 3.75, 3.75); Calibrated: 2011-07-25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: SAM 835/900 MHz; Type: SAM

WIFI 5GHz Body Rear 157ch 6Mbps/Area Scan (101x151x1): Measurement grid: dx=10mm, dy=10mm

## Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.133 mW/g

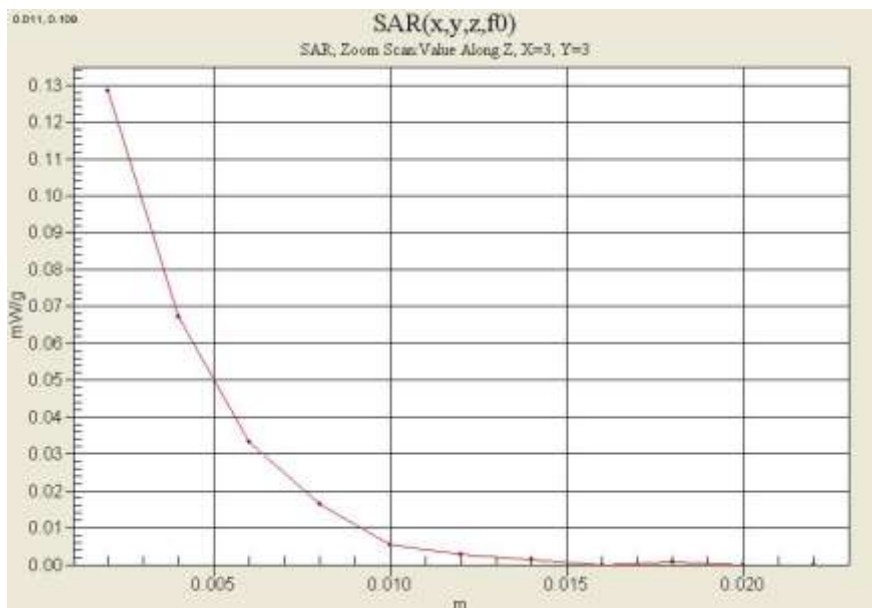
WIFI 5GHz Body Rear 157ch 6Mbps/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.45 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 0.239 W/kg

**SAR(1 g) = 0.061 mW/g; SAR(10 g) = 0.019 mW/g**

Maximum value of SAR (measured) = 0.129 mW/g





Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Jun.08, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 17; Frequency: 710 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 710$  MHz;  $\sigma = 0.878$  mho/m;  $\epsilon_r = 42.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.68, 6.68, 6.68); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

**Left Touch QPSK 1RB 49offset 23790ch/Area Scan (71x101x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.256 mW/g

**Left Touch QPSK 1RB 49offset 23790ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.1 V/m; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 0.287 W/kg

**SAR(1 g) = 0.239 mW/g; SAR(10 g) = 0.189 mW/g**

Maximum value of SAR (measured) = 0.247 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.3 °C  
Ambient Temperature: 21.5 °C  
Test Date: Jun.14, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE ; Frequency: 710 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 710 \text{ MHz}$ ;  $\sigma = 0.934 \text{ mho/m}$ ;  $\epsilon_r = 55.3$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.38, 6.38, 6.38); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phamtom ; Type: SAM

**LTE Band 17 HotSpot Body Front QPSK 1RB 49offset 23790/Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.322 mW/g

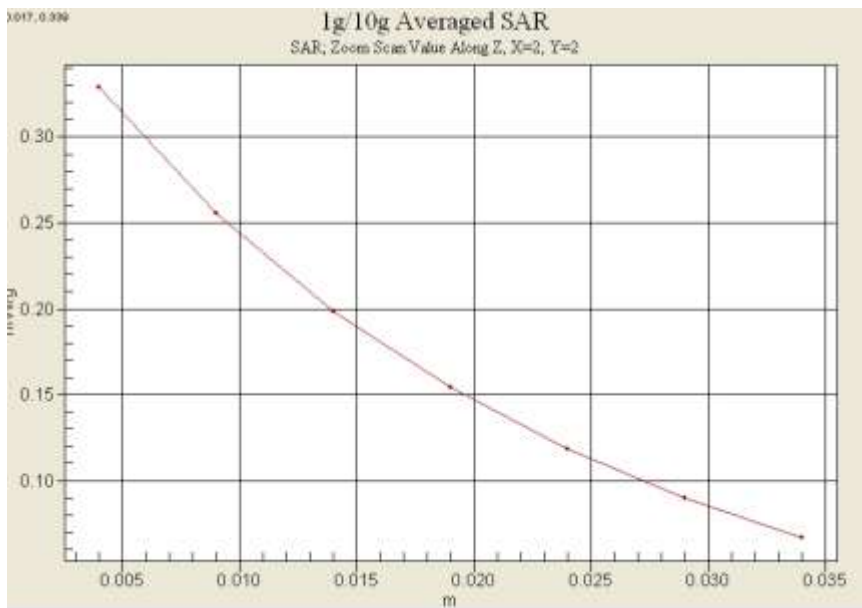
**LTE Band 17 HotSpot Body Front QPSK 1RB 49offset 23790/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.17 V/m; Power Drift = -0.089 dB

Peak SAR (extrapolated) = 0.398 W/kg

**SAR(1 g) = 0.315 mW/g; SAR(10 g) = 0.238 mW/g**

Maximum value of SAR (measured) = 0.329 mW/g



Test Laboratory: HCT CO., LTD  
 EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
 Liquid Temperature: 21.3 °C  
 Ambient Temperature: 21.5 °C  
 Test Date: Jun.11, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
 Medium parameters used (interpolated):  $f = 836.5 \text{ MHz}$ ;  $\sigma = 0.877 \text{ mho/m}$ ;  $\epsilon_r = 43$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

- DASY4 Configuration:
- Probe: ET3DV6 - SN1609; ConvF(6.36, 6.36, 6.36); Calibrated: 2012-03-19
  - Sensor-Surface: 4mm (Mechanical Surface Detection)
  - Electronics: DAE4 Sn648; Calibrated: 2012-04-27
  - Phantom: SAM 835/900 MHz; Type: SAM

**Right touch QPSK 1RB 0offset 20525ch/Area Scan (71x101x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.215 mW/g

**Right touch QPSK 1RB 0offset 20525ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

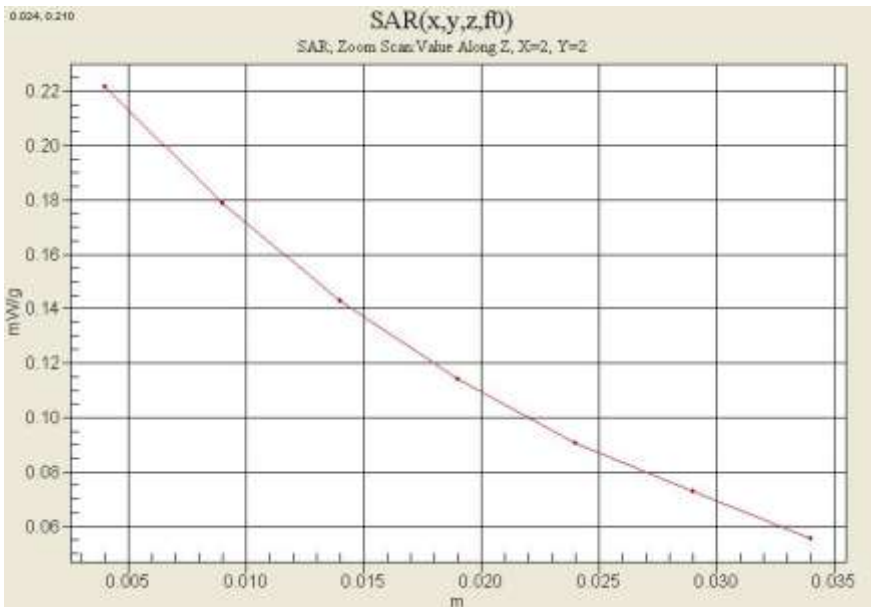
Reference Value = 16.3 V/m; Power Drift = 0.119 dB

Peak SAR (extrapolated) = 0.254 W/kg

**SAR(1 g) = 0.211 mW/g; SAR(10 g) = 0.161 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.222 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.15, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 5; Frequency: 836.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**Hotspot Body Left side QPSK 1RB 0offset 20525ch/Area Scan (41x111x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.366 mW/g

**Hotspot Body Left side QPSK 1RB 0offset 20525ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

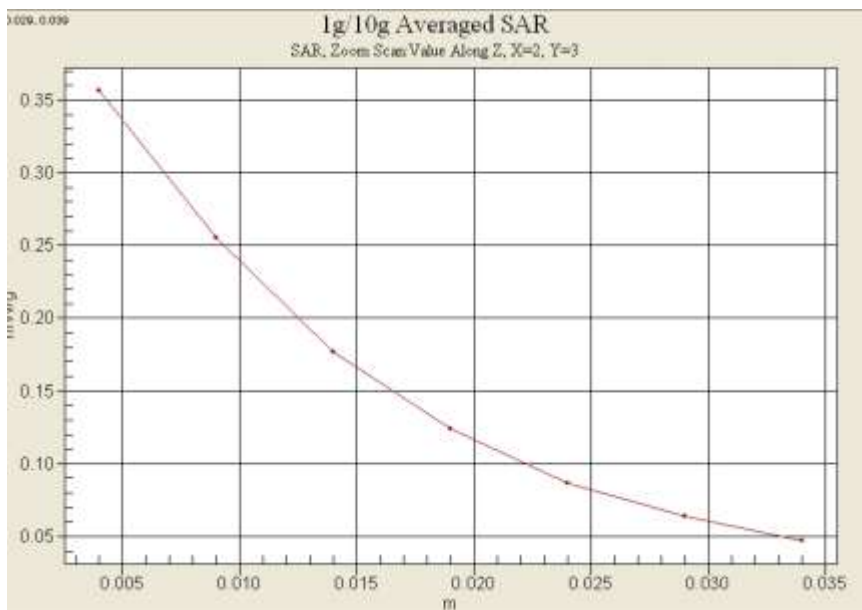
Reference Value = 11.7 V/m; Power Drift = -0.173 dB

Peak SAR (extrapolated) = 0.450 W/kg

**SAR(1 g) = 0.327 mW/g; SAR(10 g) = 0.221 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.357 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Jun.12, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.25$  mho/m;  $\epsilon_r = 38.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(5.5, 5.5, 5.5); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right touch QPSK 1RB 49offset 20175/Area Scan (71x101x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.432 mW/g

**Right touch QPSK 1RB 49offset 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.5 V/m; Power Drift = 0.014 dB

Peak SAR (extrapolated) = 0.552 W/kg

**SAR(1 g) = 0.411 mW/g; SAR(10 g) = 0.264 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.452 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.18, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 4; Frequency: 1732.5 MHz; Duty Cycle: 1:1  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 55.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 835/900 Phantom ; Type: SAM

**LTE Band 4 Hotspot bottom QPSK 1RB 49Offset 20175ch/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 1.25 mW/g

**LTE Band 4 Hotspot bottom QPSK 1RB 49Offset 20175ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

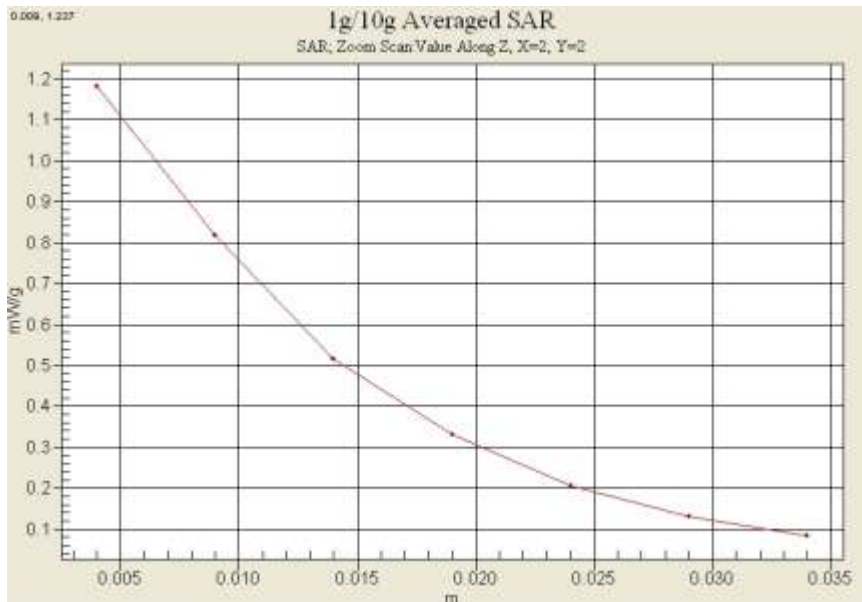
Reference Value = 30.1 V/m; Power Drift = 0.161 dB

Peak SAR (extrapolated) = 1.52 W/kg

**SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.565 mW/g**

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.18 mW/g



Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.2 °C  
Ambient Temperature: 21.4 °C  
Test Date: Jun.13, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 2(10MHz BW); Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.38$  mho/m;  $\epsilon_r = 39.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Right Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(5.26, 5.26, 5.26); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Right touch QPSK 1RB 49offset 18900/Area Scan (71x101x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.304 mW/g

**Right touch QPSK 1RB 49offset 18900/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.56 V/m; Power Drift = 0.073 dB

Peak SAR (extrapolated) = 0.410 W/kg

**SAR(1 g) = 0.277 mW/g; SAR(10 g) = 0.172 mW/g**

Maximum value of SAR (measured) = 0.306 mW/g





Test Laboratory: HCT CO., LTD  
EUT Type: 850/1900 GSM/GPRS/EDGE/WCDMA Phone with Bluetooth/WLAN/NFC  
Liquid Temperature: 21.1 °C  
Ambient Temperature: 21.3 °C  
Test Date: Jun.19, 2012

**DUT: P9090; Type: bar; Serial: #1**

Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

## DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: 1800/1900 Phantom; Type: SAM

**LTE Band 2 Hotspot bottom QPSK 1RB 49Offset 18900ch/Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.52 mW/g

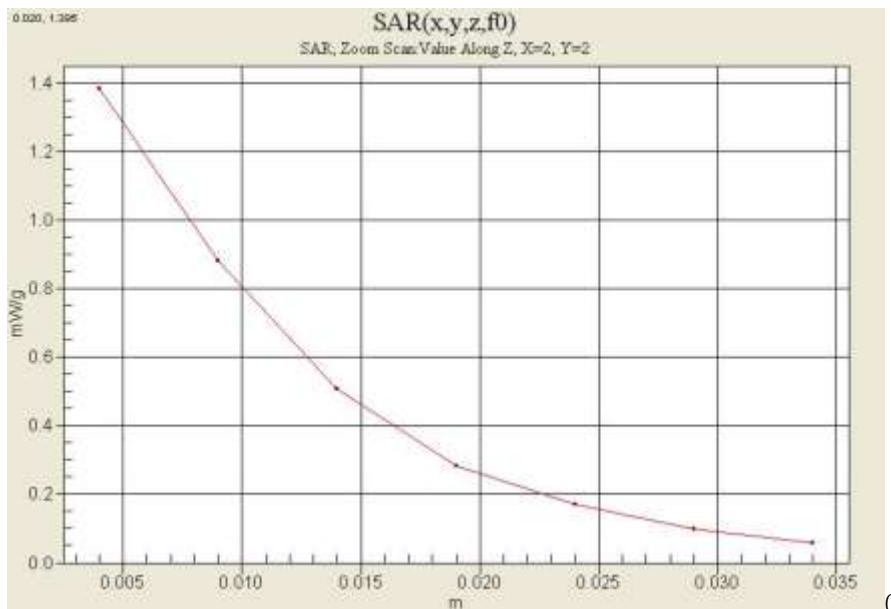
**LTE Band 2 Hotspot bottom QPSK 1RB 49Offset 18900ch/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.0 V/m; Power Drift = -0.113 dB

Peak SAR (extrapolated) = 1.97 W/kg

**SAR(1 g) = 1.23 mW/g; SAR(10 g) = 0.614 mW/g**

Maximum value of SAR (measured) = 1.38 mW/g



## Attachment 2. – Dipole Validation Plots

## ■ Validation Data (850 MHz Head)

Test Laboratory: HCT CO., LTD

Input Power 100 mW (20 dBm)

Liquid Temp: 21.2 °C

Test Date: Jun. 04, 2012

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 – SN:441

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

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.884$  mho/m;  $\epsilon_r = 43.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 – SN3797; ConvF(8.93, 8.93, 8.93); Calibrated: 2011-07-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: 1800/1900 Phantom; Type: SAM

**Validation 835MHz/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.04 mW/g

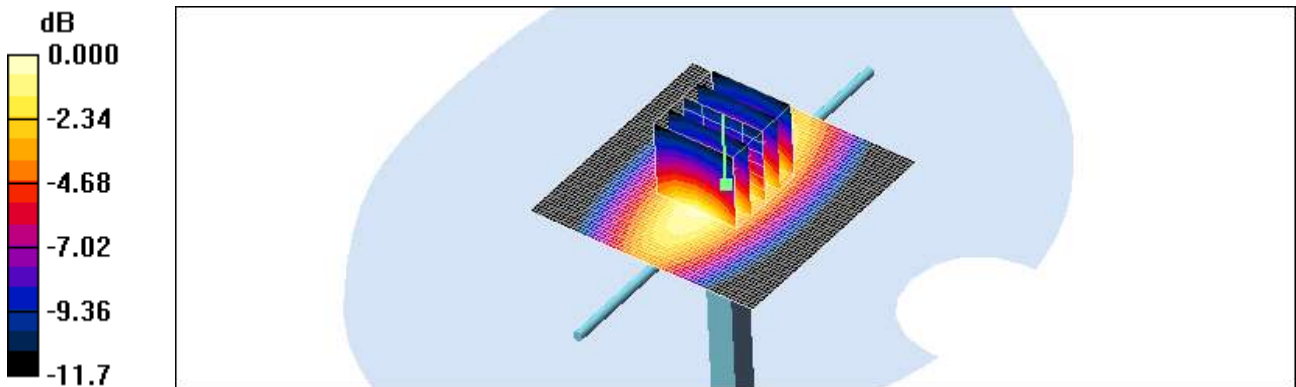
**Validation 835MHz/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 34.2 V/m; Power Drift = -0.008 dB

Peak SAR (extrapolated) = 1.57 W/kg

**SAR(1 g) = 0.950 mW/g; SAR(10 g) = 0.578 mW/g**

Maximum value of SAR (measured) = 1.05 mW/g



0 dB = 1.05mW/g

## ■ Validation Data (850 MHz Body)

Test Laboratory: HCT CO., LTD

Input Power 100 mW (20 dBm)

Liquid Temp: 21.1 °C

Test Date: Jun. 04, 2012

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 – SN:441

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

Medium parameters used:  $f = 835$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

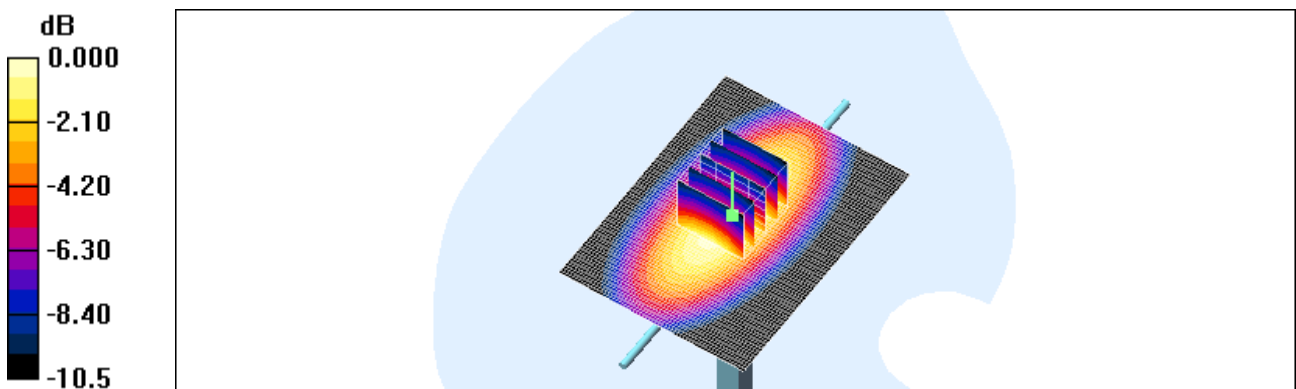
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 – SN3797; ConvF(9.14, 9.14, 9.14); Calibrated: 2011-07-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: 800/900 Phantom; Type: SAM

**Validation 835 MHz/Area Scan (61x81x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.03 mW/g

**Validation 835 MHz/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 31.4 V/m; Power Drift = -0.006 dB  
Peak SAR (extrapolated) = 1.44 W/kg  
**SAR(1 g) = 0.952 mW/g; SAR(10 g) = 0.621 mW/g**  
Maximum value of SAR (measured) = 1.03 mW/g



0 dB = 1.03mW/g

## ■ Validation Data (1900 MHz Head)

Test Laboratory: HCT CO., LTD

Input Power 100 mW (20 dBm)

Liquid Temp: 21.2 °C

Test Date: Jun. 05, 2012

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 – SN:5d032

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 39.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 – SN3797; ConvF(7.6, 7.6, 7.6); Calibrated: 2011-07-25
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: 1800/1900 Phantom; Type: SAM

Dipole 1900MHz Validation/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 4.73 mW/g

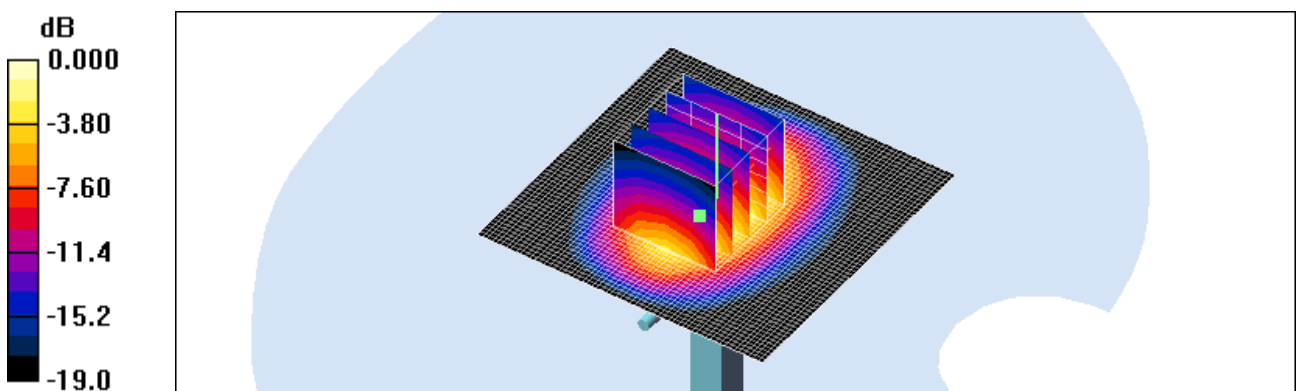
Dipole 1900MHz Validation/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 56.8 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 7.61 W/kg

**SAR(1 g) = 4.09 mW/g; SAR(10 g) = 2.13 mW/g**

Maximum value of SAR (measured) = 4.52 mW/g



0 dB = 4.52mW/g

## ■ Validation Data (1900 MHz Body)

Test Laboratory: HCT CO., LTD

Input Power 100 mW (20 dBm)

Liquid Temp: 21.2 °C

Test Date: Jun. 04, 2012

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 – SN:5d032

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

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 51.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 – SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

Dipole 1900MHz Validation/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 5.04 mW/g

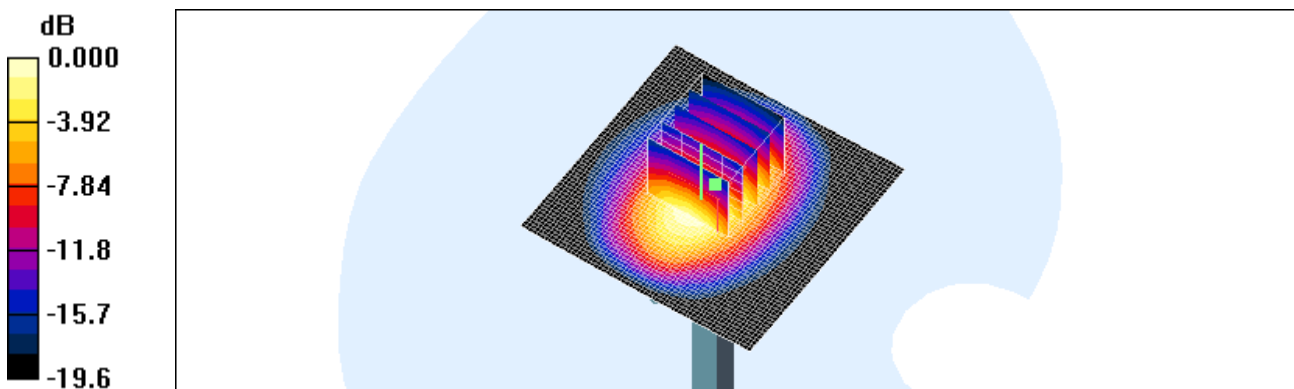
Dipole 1900MHz Validation/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 61.3 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 6.71 W/kg

**SAR(1 g) = 4.24 mW/g; SAR(10 g) = 2.25 mW/g**

Maximum value of SAR (measured) = 4.77 mW/g



0 dB = 4.77mW/g

## ■ Validation Data (LTE17 750 MHz Head)

Test Laboratory: HCT CO., LTD  
Input Power 100 mW (20 dBm)  
Liquid Temp: 21.2 °C  
Test Date: Jun. 08, 2012

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 – SN:1014

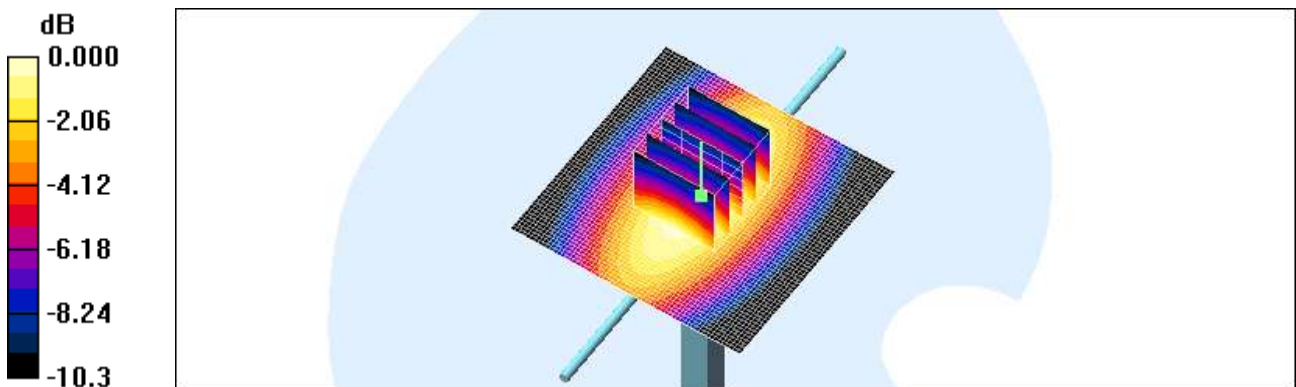
Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.91$  mho/m;  $\epsilon_r = 42.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 – SN1609; ConvF(6.68, 6.68, 6.68); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

**Validation 750MHz/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.903 mW/g

**Validation 750MHz/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 32.9 V/m; Power Drift = -0.053 dB  
Peak SAR (extrapolated) = 1.19 W/kg  
**SAR(1 g) = 0.838 mW/g; SAR(10 g) = 0.556 mW/g**  
Maximum value of SAR (measured) = 0.904 mW/g



0 dB = 0.904mW/g



## ■ Validation Data (LTE 17 750 MHz Body)

Test Laboratory: HCT CO., LTD  
Input Power 100 mW (20 dBm)  
Liquid Temp: 21.3 °C  
Test Date: Jun. 14, 2012

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 – SN:1014

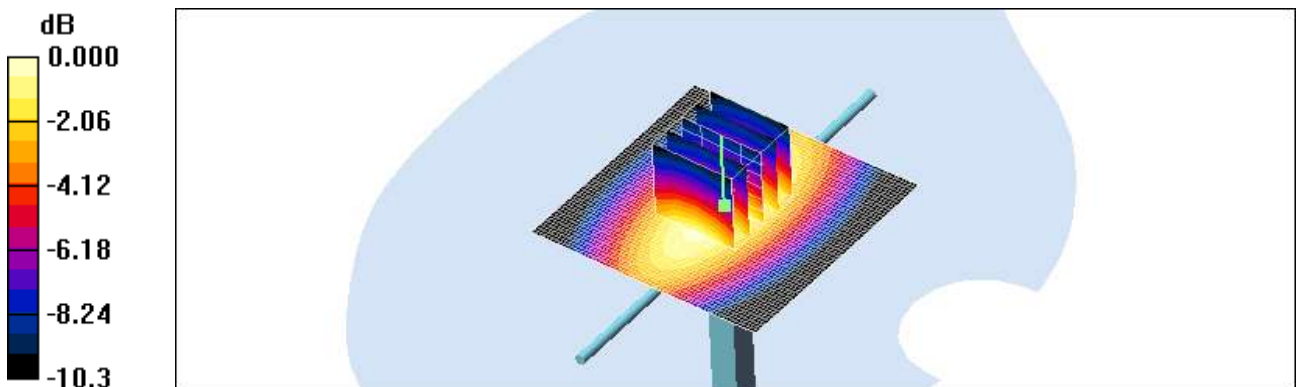
Communication System: CW; Frequency: 750 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.971$  mho/m;  $\epsilon_r = 54.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 – SN1609; ConvF(6.38, 6.38, 6.38); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

**Validation 750MHz/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.969 mW/g

**Validation 750MHz/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 32.9 V/m; Power Drift = -0.046 dB  
Peak SAR (extrapolated) = 1.28 W/kg  
**SAR(1 g) = 0.896 mW/g; SAR(10 g) = 0.592 mW/g**  
Maximum value of SAR (measured) = 0.971 mW/g



0 dB = 0.971mW/g

## ■ Validation Data (LTE5 850 MHz Head)

Test Laboratory: HCT CO., LTD

Input Power 100 mW (20 dBm)

Liquid Temp: 21.3 °C

Test Date: Jun. 11, 2012

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 – SN:441

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.876 \text{ mho/m}$ ;  $\epsilon_r = 43$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 – SN1609; ConvF(6.36, 6.36, 6.36); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

**Validation 835MHz/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.05 mW/g

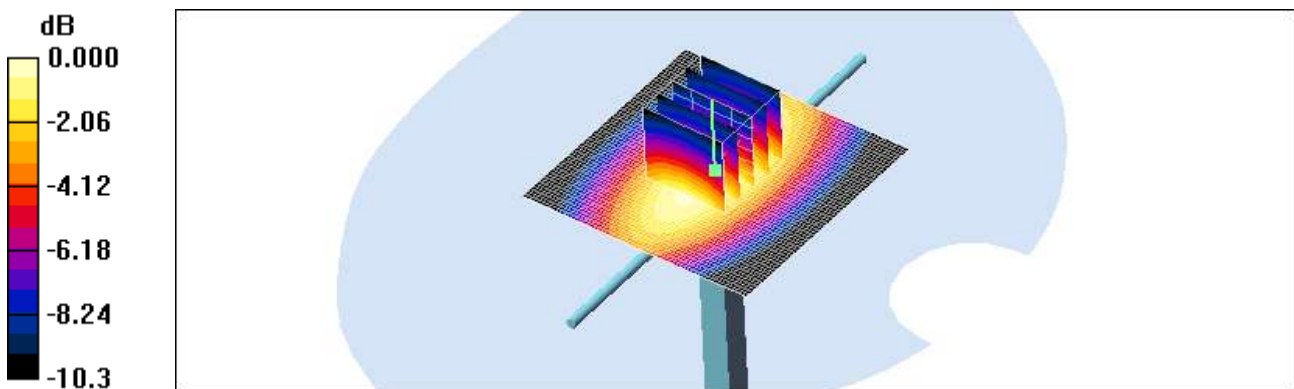
**Validation 835MHz/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 35.9 V/m; Power Drift = 0.005 dB

Peak SAR (extrapolated) = 1.41 W/kg

**SAR(1 g) = 0.972 mW/g; SAR(10 g) = 0.642 mW/g**

Maximum value of SAR (measured) = 1.05 mW/g



0 dB = 1.05mW/g

## ■ Validation Data (LTE5 850 MHz Body)

Test Laboratory: HCT CO., LTD  
Input Power 100 mW (20 dBm)  
Liquid Temp: 21.1 °C  
Test Date: Jun. 15, 2012

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 – SN:441

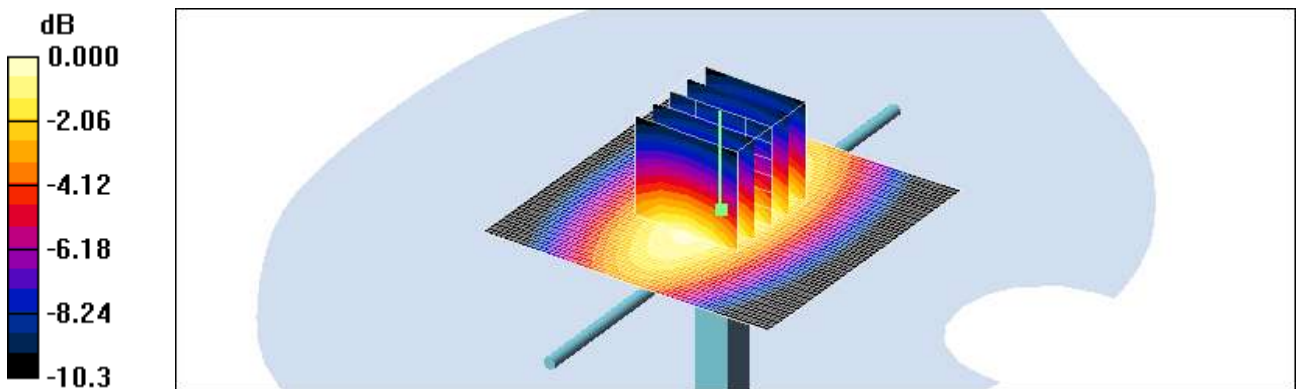
Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 1.01$  mho/m;  $\epsilon_r = 54.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 – SN1609; ConvF(6.24, 6.24, 6.24); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 835/900 MHz; Type: SAM

**Validation 835MHz/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.07 mW/g

**Validation 835MHz/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 33.8 V/m; Power Drift = -0.035 dB  
Peak SAR (extrapolated) = 1.40 W/kg  
**SAR(1 g) = 0.983 mW/g; SAR(10 g) = 0.651 mW/g**  
Maximum value of SAR (measured) = 1.06 mW/g



0 dB = 1.06mW/g

## ■ Validation Data (LTE4 1800 MHz Head)

Test Laboratory: HCT CO., LTD  
Input Power 100 mW (20 dBm)  
Liquid Temp: 21.2 °C  
Test Date: Jun. 12, 2012

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 – SN:2d006

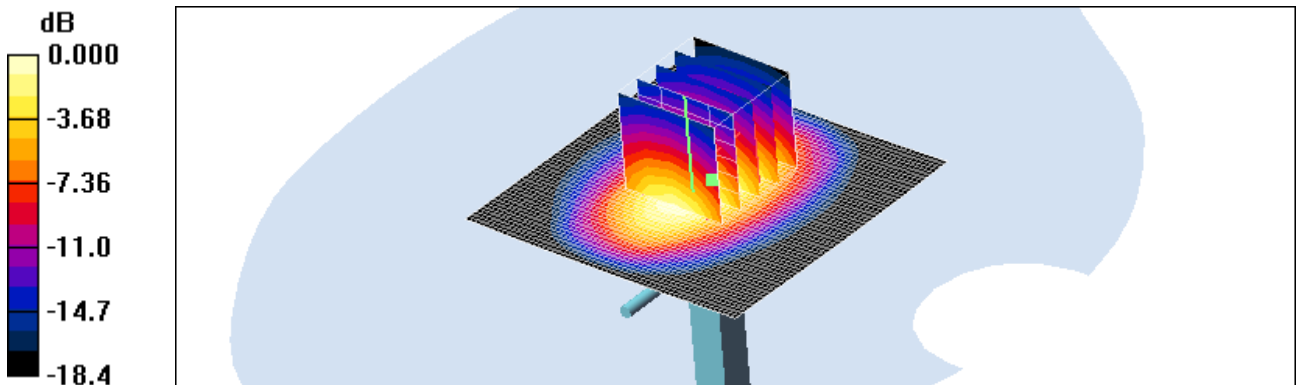
Communication System: CW; Frequency: 1800 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1800$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 39.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 – SN1609; ConvF(5.5, 5.5, 5.5); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

Dipole 1800MHz Validation/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 4.48 mW/g

Dipole 1800MHz Validation/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 57.8 V/m; Power Drift = -0.075 dB  
Peak SAR (extrapolated) = 5.94 W/kg  
**SAR(1 g) = 3.69 mW/g; SAR(10 g) = 1.98 mW/g**  
Maximum value of SAR (measured) = 4.13 mW/g



0 dB = 4.13mW/g

## ■ Validation Data (LTE4 1800 MHz Body)

Test Laboratory: HCT CO., LTD  
Input Power 100 mW (20 dBm)  
Liquid Temp: 21.2 °C  
Test Date: Jun. 18, 2012

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 – SN:2d006

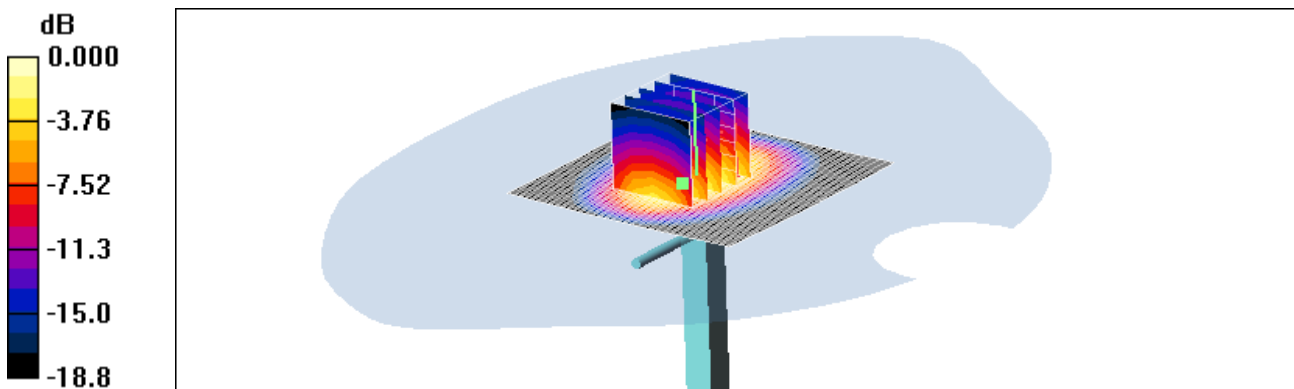
Communication System: CW; Frequency: 1800 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1800$  MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 55$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 – SN1609; ConvF(4.8, 4.8, 4.8); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

Dipole 1800MHz Validation/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 4.78 mW/g

Dipole 1800MHz Validation/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 60.1 V/m; Power Drift = -0.010 dB  
Peak SAR (extrapolated) = 6.13 W/kg  
SAR(1 g) = 4.01 mW/g; SAR(10 g) = 2.17 mW/g  
Maximum value of SAR (measured) = 4.52 mW/g



0 dB = 4.52mW/g

## ■ Validation Data (LTE2 1900 MHz Head)

Test Laboratory: HCT CO., LTD  
 Input Power 100 mW (20 dBm)  
 Liquid Temp: 21.2 °C  
 Test Date: Jun. 13, 2012

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 – SN:5d032**

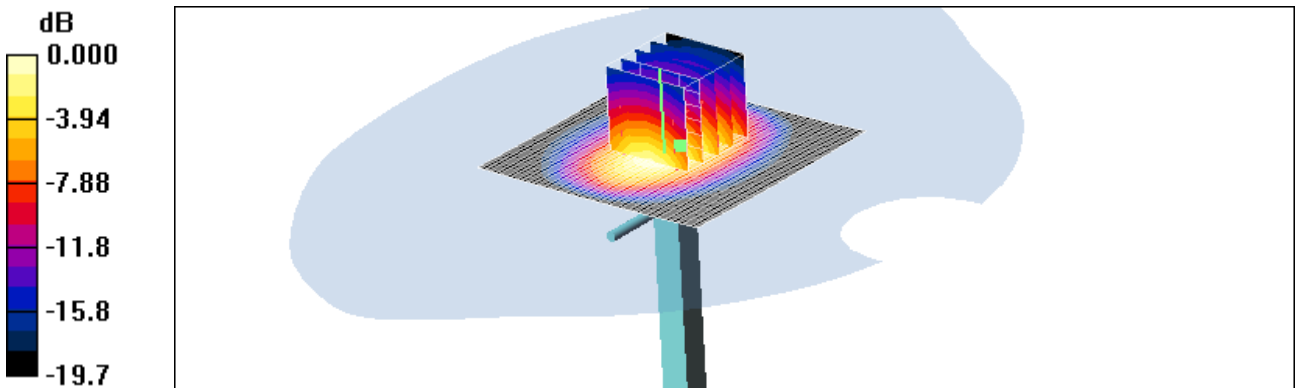
Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1  
 Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.4 \text{ mho/m}$ ;  $\epsilon_r = 39.9$ ;  $\rho = 1000 \text{ kg/m}^3$   
 Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 – SN1609; ConvF(5.26, 5.26, 5.26); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Dipole 1900MHz Validation/Area Scan (61x61x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (interpolated) = 4.67 mW/g

**Dipole 1900MHz Validation/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 60.2 V/m; Power Drift = 0.001 dB  
 Peak SAR (extrapolated) = 6.66 W/kg  
**SAR(1 g) = 3.92 mW/g; SAR(10 g) = 2.05 mW/g**  
 Maximum value of SAR (measured) = 4.39 mW/g



0 dB = 4.39mW/g

## ■ Validation Data (LTE2 1900 MHz Body)

Test Laboratory: HCT CO., LTD  
Input Power 100 mW (20 dBm)  
Liquid Temp: 21.3 °C  
Test Date: Jun. 19, 2012

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 – SN:5d032

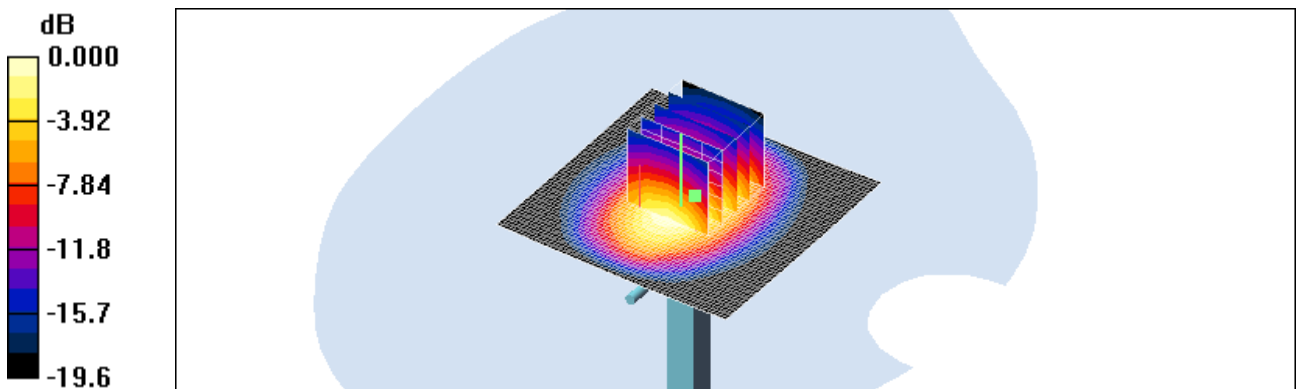
Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.5$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 – SN1609; ConvF(4.55, 4.55, 4.55); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

Dipole 1900MHz Validation/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 4.73 mW/g

Dipole 1900MHz Validation/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm  
Reference Value = 59.6 V/m; Power Drift = -0.054 dB  
Peak SAR (extrapolated) = 6.29 W/kg  
SAR(1 g) = 3.95 mW/g; SAR(10 g) = 2.09 mW/g  
Maximum value of SAR (measured) = 4.45 mW/g



0 dB = 4.45mW/g



## ■ Validation Data (2450 MHz Head)

Test Laboratory: HCT CO., LTD

Input Power 100 mW (20 dBm)

Liquid Temp: 21.3 °C

Test Date: Jun. 7, 2012

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 – SN:743

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

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.85$  mho/m;  $\epsilon_r = 38.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 – SN1609; ConvF(4.52, 4.52, 4.52); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Validation 2450MHz/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 6.40 mW/g

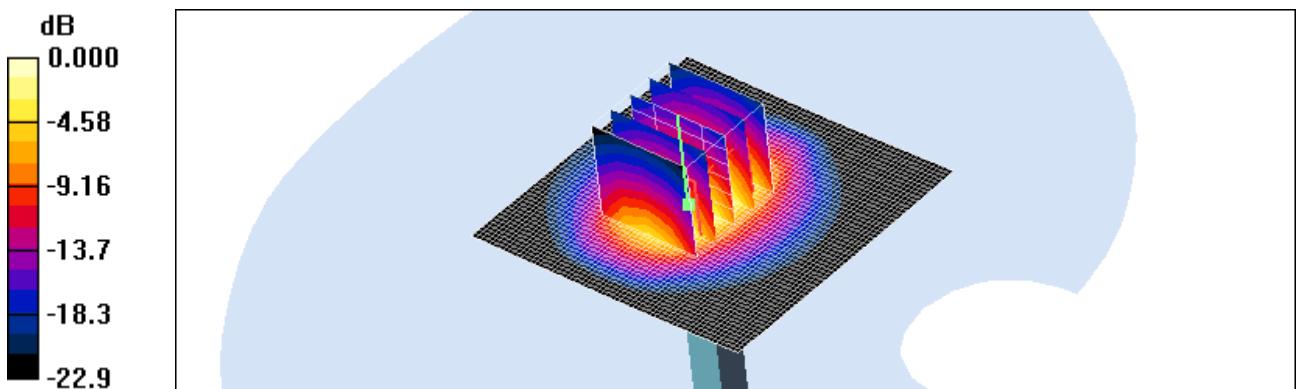
**Validation 2450MHz/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 60.1 V/m; Power Drift = -0.123 dB

Peak SAR (extrapolated) = 12.0 W/kg

**SAR(1 g) = 5.3 mW/g; SAR(10 g) = 2.44 mW/g**

Maximum value of SAR (measured) = 5.79 mW/g



0 dB = 5.79mW/g

## ■ Validation Data (2450 MHz Body)

Test Laboratory: HCT CO., LTD

Input Power 100 mW (20 dBm)

Liquid Temp: 21.3 °C

Test Date: Jun. 7, 2012

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 – SN:743

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

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.96$  mho/m;  $\epsilon_r = 51.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 – SN1609; ConvF(4.01, 4.01, 4.01); Calibrated: 2012-03-19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn648; Calibrated: 2012-04-27
- Phantom: SAM 1800/1900 MHz; Type: SAM

**Validation 2450MHz/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 6.08 mW/g

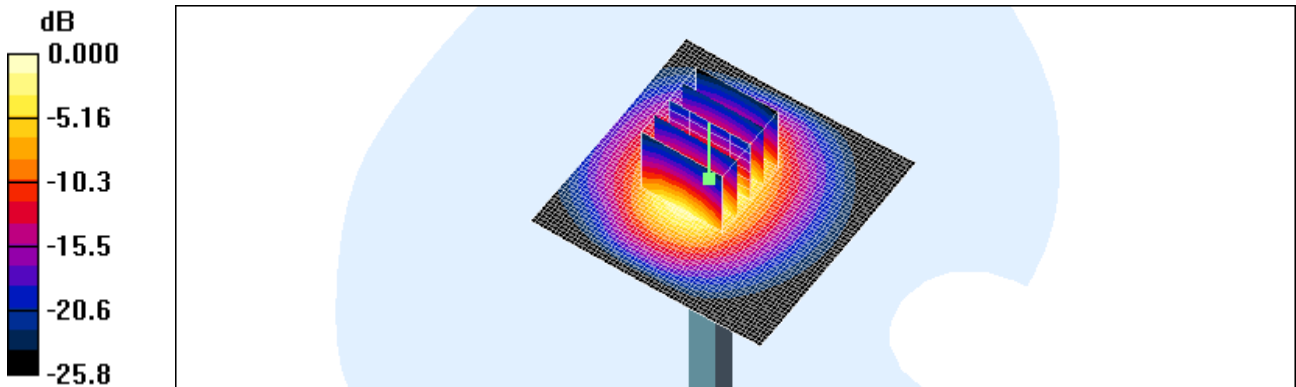
**Validation 2450MHz/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 53.0 V/m; Power Drift = 0.004 dB

Peak SAR (extrapolated) = 13.4 W/kg

**SAR(1 g) = 5.16 mW/g; SAR(10 g) = 2.27 mW/g**

Maximum value of SAR (measured) = 5.58 mW/g



0 dB = 5.58mW/g

## ■ Validation Data (5.2 GHz Head)

Test Laboratory: HCT CO., LTD

Input Power 100 mW (20 dBm)

Liquid Temp: 21.3 °C

Test Date: Jun. 20, 2012

DUT: Dipole 5GHz; Type: D5000V2; Serial: D5000V2 – SN:1107

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5200$  MHz;  $\sigma = 4.53$  mho/m;  $\epsilon_r = 36.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 – SN3797; ConvF(4.73, 4.73, 4.73); Calibrated: 2011-07-25

- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn466; Calibrated: 2012-02-21

- Phantom: 1800/1900 Phantom; Type: SAM

**Validation 5200MHz/Area Scan (61x71x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 9.46 mW/g

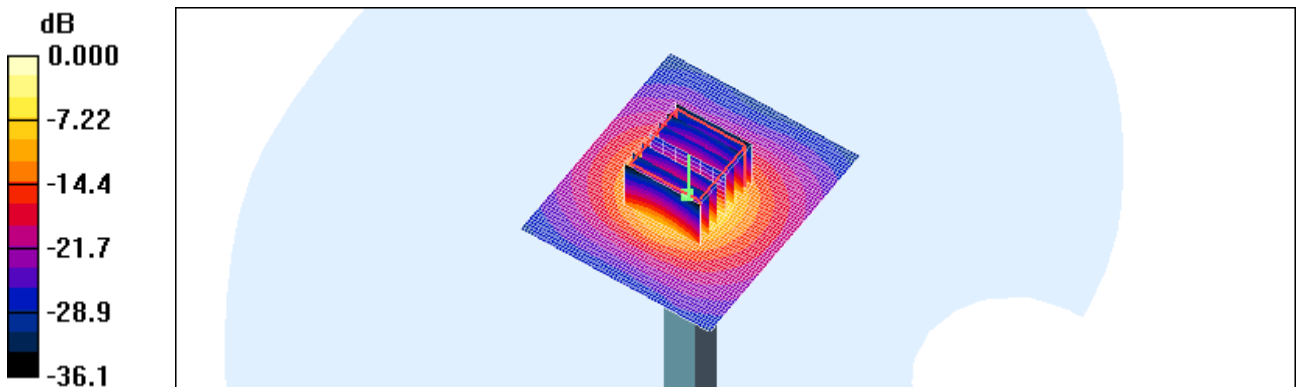
**Validation 5200MHz/Zoom Scan (7x7x11)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 45.2 V/m; Power Drift = -0.051 dB

Peak SAR (extrapolated) = 32.4 W/kg

**SAR(1 g) = 7.94 mW/g; SAR(10 g) = 2.26 mW/g**

Maximum value of SAR (measured) = 16.4 mW/g



0 dB = 16.4mW/g

## ■ Validation Data (5.2 GHz Body)

Test Laboratory: HCT CO., LTD

Input Power 100 mW (20 dBm)

Liquid Temp: 21.3 °C

Test Date: Jun. 20, 2012

DUT: Dipole 5GHz; Type: D5000V2; Serial: D5000V2 – SN:1107

Communication System: CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5200$  MHz;  $\sigma = 5.2$  mho/m;  $\epsilon_r = 47.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 – SN3797; ConvF(4.1, 4.1, 4.1); Calibrated: 2011-07-25

- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn466; Calibrated: 2012-02-21

- Phantom: 800/900 Phantom; Type: SAM

**Validation 5200MHz/Area Scan (61x71x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 9.38 mW/g

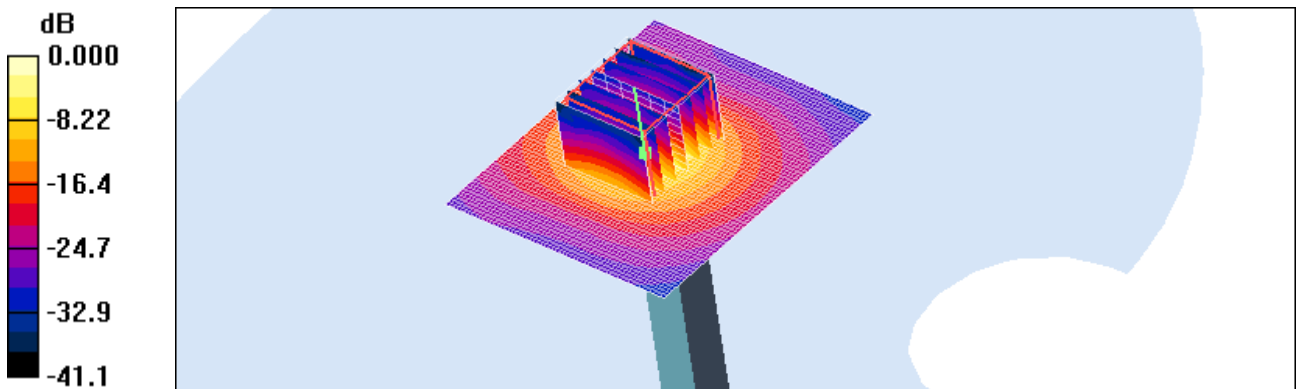
**Validation 5200MHz/Zoom Scan (7x7x11)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 37.1 V/m; Power Drift = 0.084 dB

Peak SAR (extrapolated) = 34.5 W/kg

**SAR(1 g) = 7.68 mW/g; SAR(10 g) = 2.1 mW/g**

Maximum value of SAR (measured) = 16.3 mW/g



0 dB = 16.3mW/g

## ■ Validation Data (5.5 GHz Head)

Test Laboratory: HCT CO., LTD  
Input Power 100 mW (20 dBm)  
Liquid Temp: 21.3 °C  
Test Date: Jun. 20, 2012

DUT: Dipole 5GHz; Type: D5000V2; Serial: D5000V2 – SN:1107

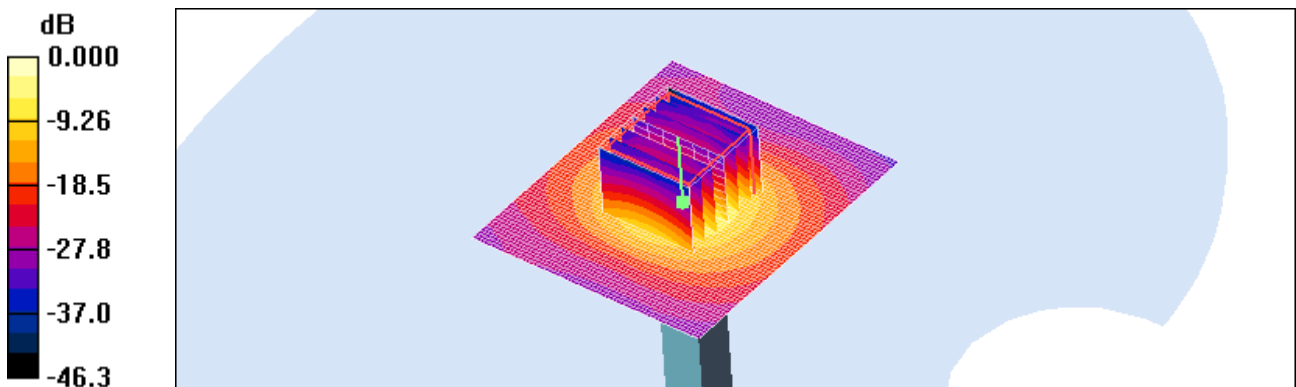
Communication System: CW; Frequency: 5500 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 5500$  MHz;  $\sigma = 4.89$  mho/m;  $\epsilon_r = 35.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 – SN3797; ConvF(4.48, 4.48, 4.48); Calibrated: 2011-07-25
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn466; Calibrated: 2012-02-21
- Phantom: 1800/1900 Phantom; Type: SAM

**Validation 5500MHz/Area Scan (61x71x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (interpolated) = 9.87 mW/g

**Validation 5500MHz/Zoom Scan (7x7x11)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
Reference Value = 44.5 V/m; Power Drift = -0.033 dB  
Peak SAR (extrapolated) = 38.1 W/kg  
**SAR(1 g) = 8.53 mW/g; SAR(10 g) = 2.37 mW/g**  
Maximum value of SAR (measured) = 17.6 mW/g



0 dB = 17.6mW/g

## ■ Validation Data (5.5 GHz Body)

Test Laboratory: HCT CO., LTD

Input Power 100 mW (20 dBm)

Liquid Temp: 21.3 °C

Test Date: Jun. 20, 2012

DUT: Dipole 5GHz; Type: D5000V2; Serial: D5000V2- SN:1107

Communication System: CW; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5500$  MHz;  $\sigma = 5.53$  mho/m;  $\epsilon_r = 46.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(3.72, 3.72, 3.72); Calibrated: 2011-07-25

- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn466; Calibrated: 2012-02-21

- Phantom: 800/900 Phantom; Type: SAM

**Validation 5500MHz/Area Scan (61x71x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 9.94 mW/g

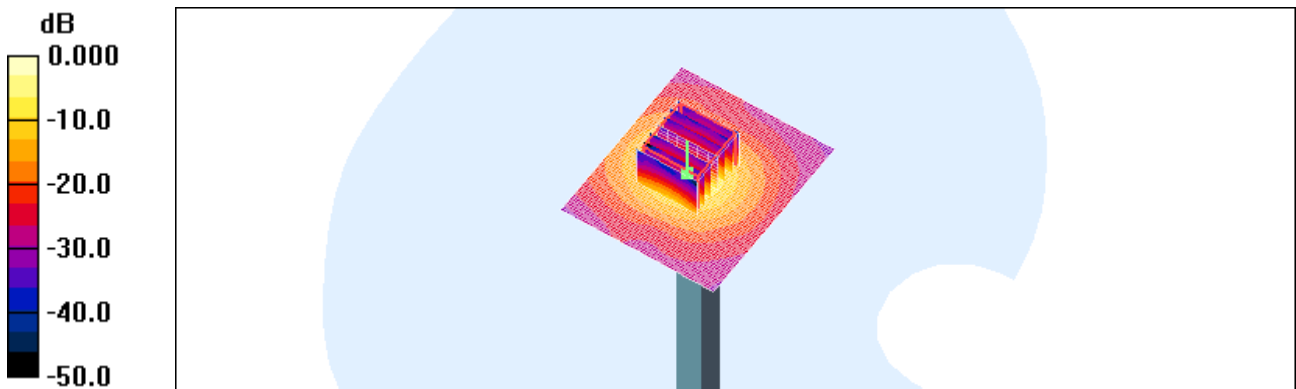
**Validation 5500MHz/Zoom Scan (7x7x11)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 36.8 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 37.5 W/kg

**SAR(1 g) = 8.07 mW/g; SAR(10 g) = 2.19 mW/g**

Maximum value of SAR (measured) = 17.4 mW/g



0 dB = 17.4mW/g

## Validation Data (5.8 GHz Head)

Test Laboratory: HCT CO., LTD

Input Power 100 mW (20 dBm)

Liquid Temp: 21.3 °C

Test Date: Jun. 20, 2012

DUT: Dipole 5GHz; Type: D5000V2; Serial: D5000V2- SN:1107

Communication System: CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.29$  mho/m;  $\epsilon_r = 35$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section ; Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: EX3DV4 - SN3797; ConvF(4.26, 4.26, 4.26); Calibrated: 2011-07-25

- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 2mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn466; Calibrated: 2012-02-21

- Phantom: 1800/1900 Phantom; Type: SAM

**Validation 5800MHz/Area Scan (61x71x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 9.14 mW/g

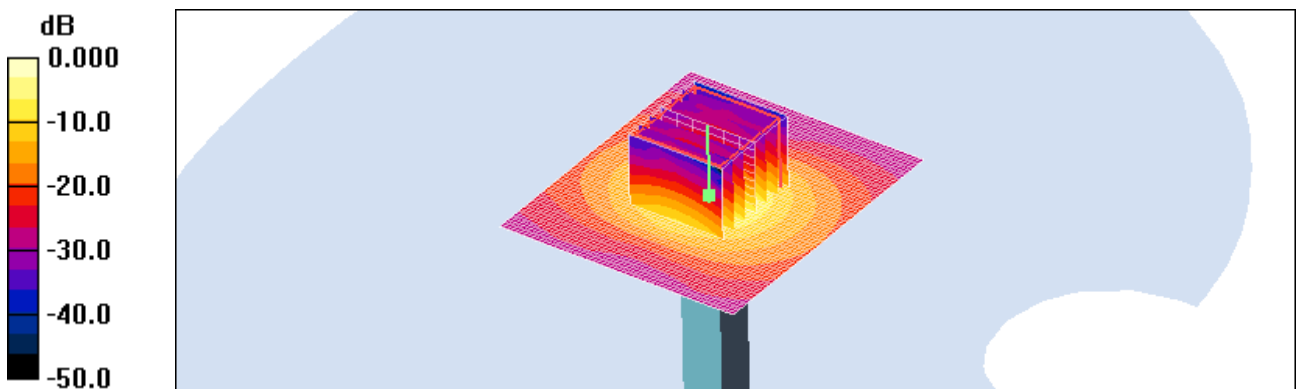
**Validation 5800MHz/Zoom Scan (7x7x11)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 39.9 V/m; Power Drift = 0.259 dB

Peak SAR (extrapolated) = 34.2 W/kg

**SAR(1 g) = 7.67 mW/g; SAR(10 g) = 2.14 mW/g**

Maximum value of SAR (measured) = 16.0 mW/g



0 dB = 16.0mW/g