



Attachment 2 – SAR Test Plots

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Left Head, Cheek/Touch 512ch (1850.2MHz)**DUT: Cellular Phone; Type: 831SH; Serial: 004401/11/168289/0**

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1700; ConvF(5.22, 5.22, 5.22); Calibrated: 2008/10/21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2008/10/31
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Cheek/Touch Position/Area Scan (11x6x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.468 mW/g

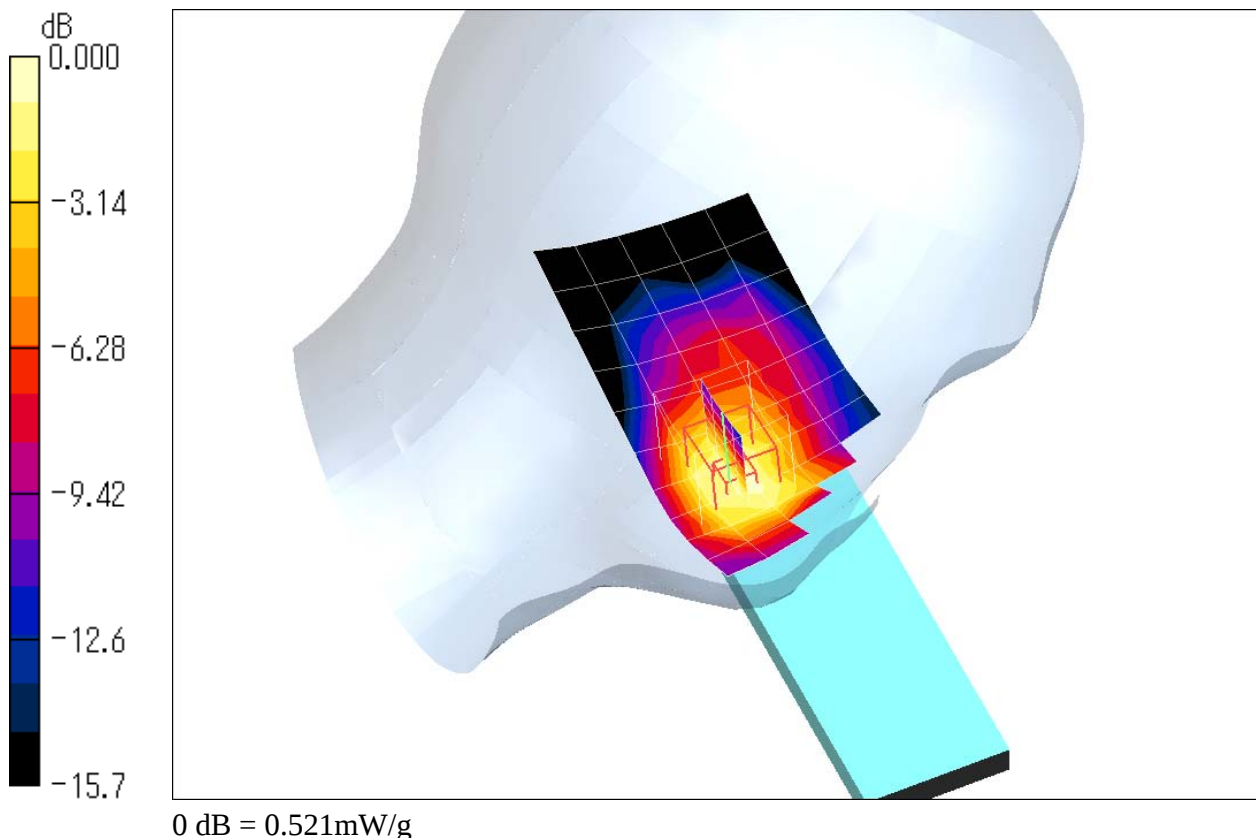
Cheek/Touch Position/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.7 V/m; Power Drift = 0.000 dB

Peak SAR (extrapolated) = 0.702 W/kg

SAR(1 g) = 0.482 mW/g; SAR(10 g) = 0.296 mW/g

Maximum value of SAR (measured) = 0.521 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Left Head, Cheek/Touch 661ch (1880.0MHz)**DUT: Cellular Phone; Type: 831SH; Serial: 004401/11/168289/0**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

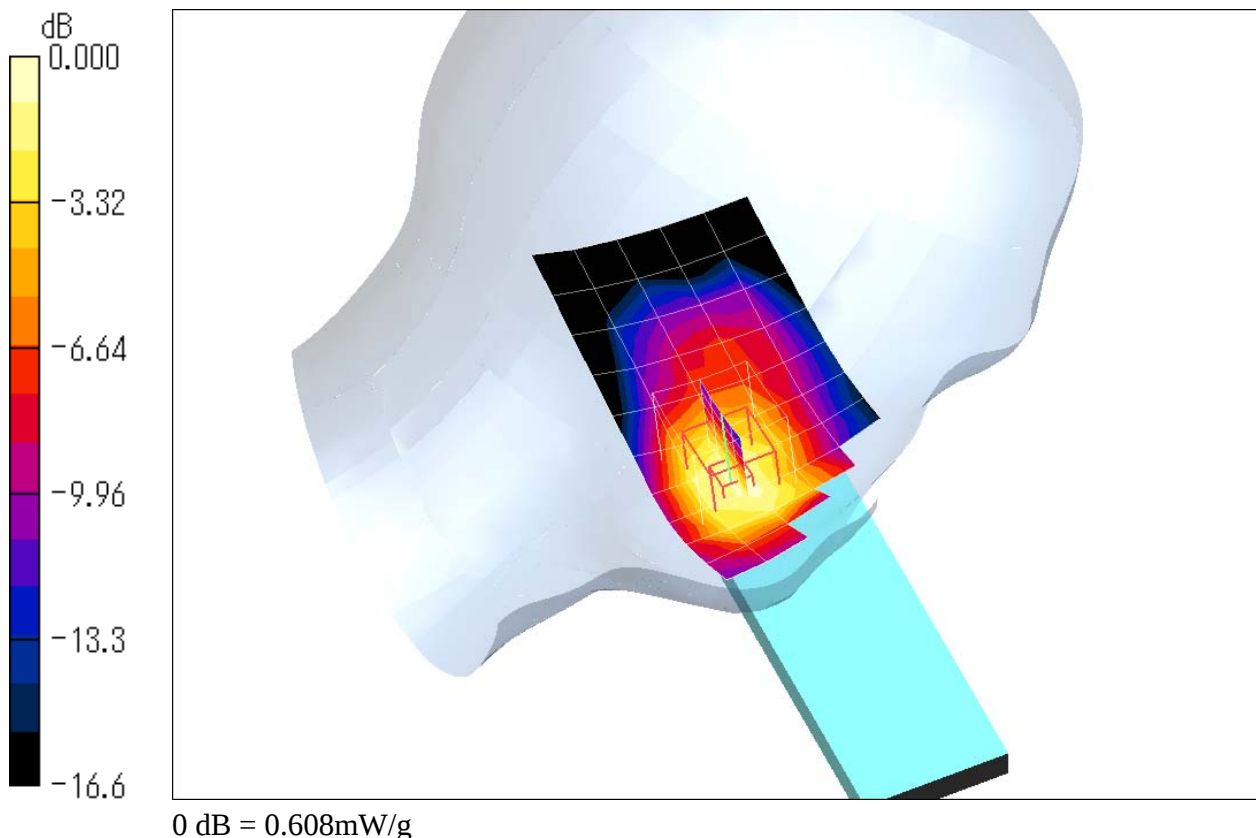
Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1700; ConvF(5.22, 5.22, 5.22); Calibrated: 2008/10/21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2008/10/31
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Cheek/Touch Position/Area Scan (11x6x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$ Maximum value of SAR (measured) = 0.544 mW/g **Cheek/Touch Position/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$ Reference Value = 16.0 V/m ; Power Drift = -0.062 dB Peak SAR (extrapolated) = 0.819 W/kg **SAR(1 g) = 0.555 mW/g ; SAR(10 g) = 0.337 mW/g** Maximum value of SAR (measured) = 0.608 mW/g 

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Left Head, Cheek/Touch 810ch (1909.8MHz)**DUT: Cellular Phone; Type: 831SH; Serial: 004401/11/168289/0**

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

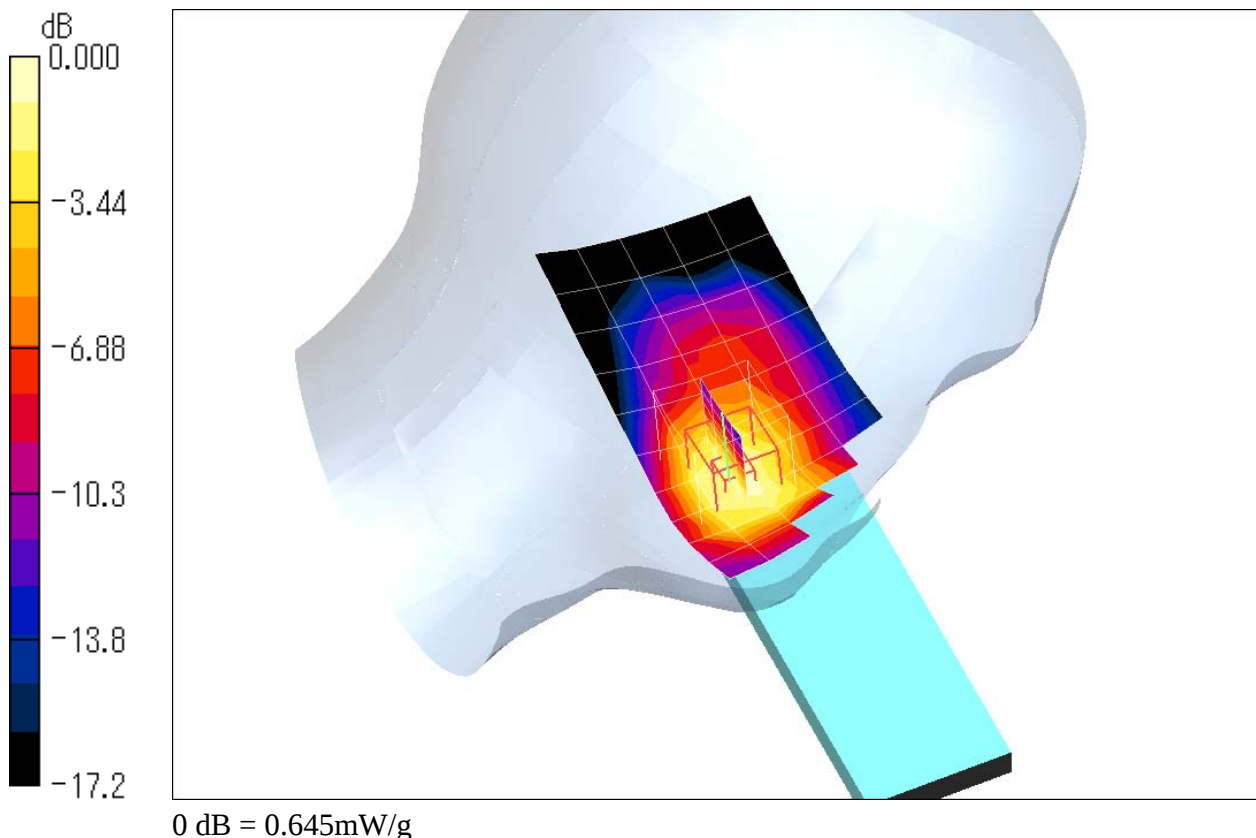
Medium: HSL1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1700; ConvF(5.22, 5.22, 5.22); Calibrated: 2008/10/21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2008/10/31
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Cheek/Touch Position/Area Scan (11x6x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$ Maximum value of SAR (measured) = 0.576 mW/g **Cheek/Touch Position/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$ Reference Value = 16.6 V/m ; Power Drift = -0.050 dB Peak SAR (extrapolated) = 0.877 W/kg **SAR(1 g) = 0.590 mW/g ; SAR(10 g) = 0.354 mW/g** Maximum value of SAR (measured) = 0.645 mW/g 

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Left Head, Cheek/Touch 810ch (1909.8MHz)

DUT: Cellular Phone; Type: 831SH; Serial: 004401/11/168289/0

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

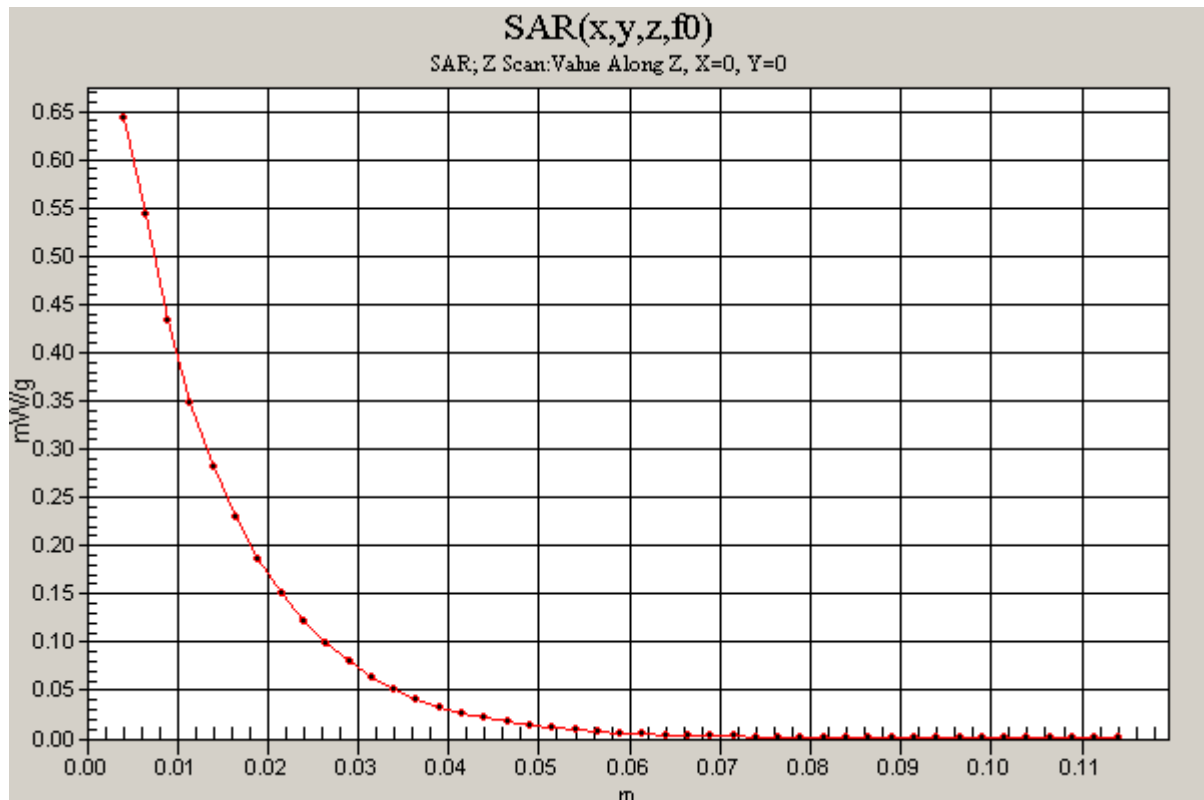
Phantom section: Left Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1700; ConvF(5.22, 5.22, 5.22); Calibrated: 2008/10/21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2008/10/31
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DAS4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Cheek/Touch Position/Z Scan (1x1x45): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=2.5\text{mm}$
Maximum value of SAR (measured) = 0.643 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Left Head, Ear/Tilt 661ch (1880.0MHz)**DUT: Cellular Phone; Type: 831SH; Serial: 004401/11/168289/0**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

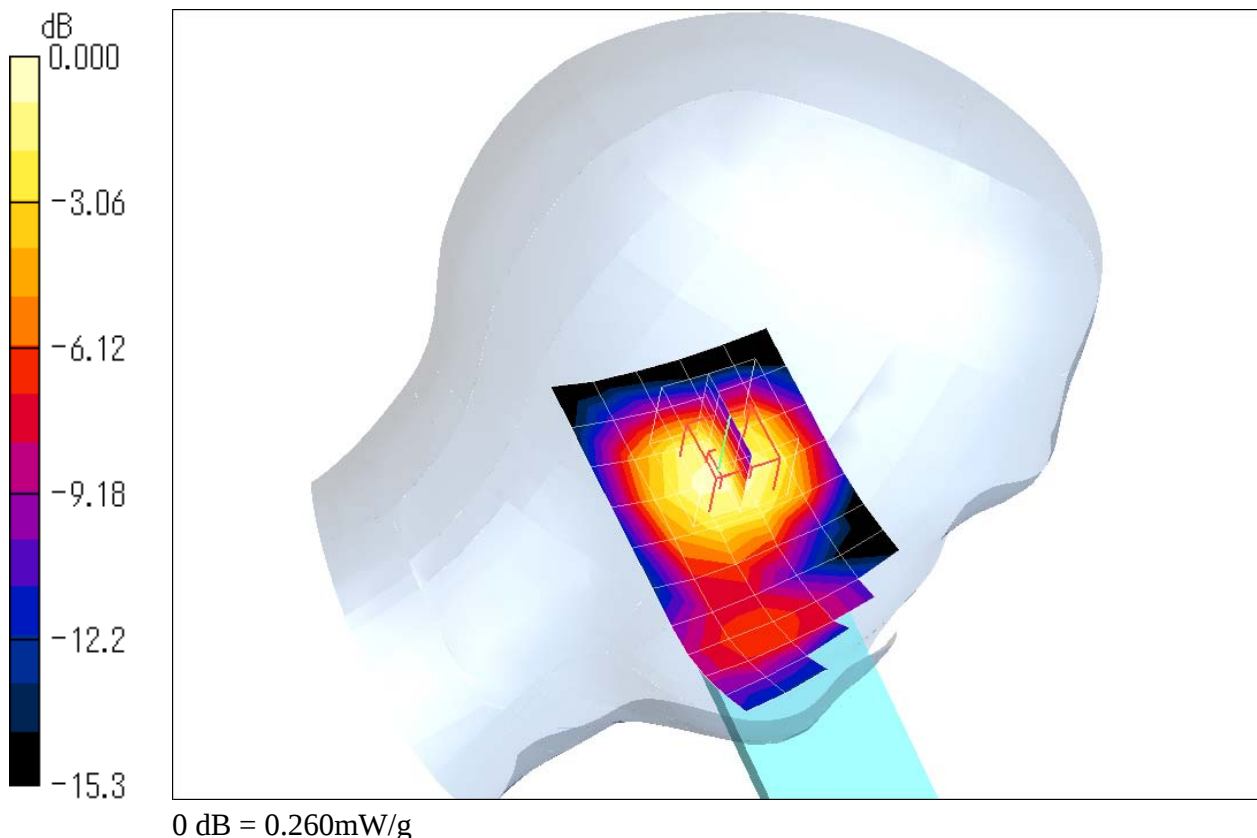
Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1700; ConvF(5.22, 5.22, 5.22); Calibrated: 2008/10/21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2008/10/31
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Ear/Tilt Position/Area Scan (11x6x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$ Maximum value of SAR (measured) = 0.257 mW/g **Ear/Tilt Position/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$ Reference Value = 9.99 V/m ; Power Drift = -0.008 dB Peak SAR (extrapolated) = 0.343 W/kg **SAR(1 g) = 0.242 mW/g ; SAR(10 g) = 0.153 mW/g** Maximum value of SAR (measured) = 0.260 mW/g 

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head, Cheek/Touch 661ch (1880.0MHz)**DUT: Cellular Phone; Type: 831SH; Serial: 004401/11/168289/0**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

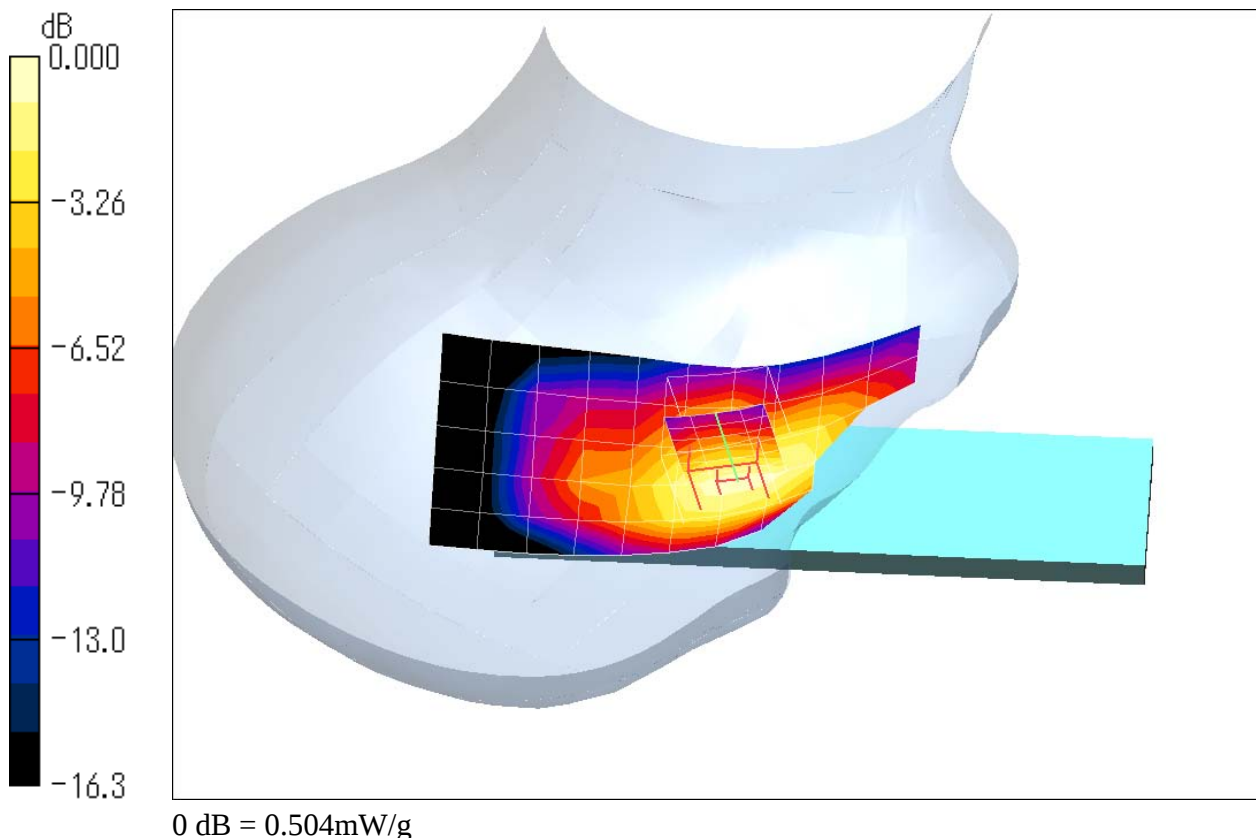
Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1700; ConvF(5.22, 5.22, 5.22); Calibrated: 2008/10/21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2008/10/31
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Cheek/Touch Position/Area Scan (11x6x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$ Maximum value of SAR (measured) = 0.487 mW/g **Cheek/Touch Position/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$ Reference Value = 16.1 V/m ; Power Drift = -0.063 dB Peak SAR (extrapolated) = 0.643 W/kg **SAR(1 g) = 0.465 mW/g ; SAR(10 g) = 0.300 mW/g** Maximum value of SAR (measured) = 0.504 mW/g 

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head, Ear/Tilt 661ch (1880.0MHz)

DUT: Cellular Phone; Type: 831SH; Serial: 004401/11/168289/0

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1700; ConvF(5.22, 5.22, 5.22); Calibrated: 2008/10/21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2008/10/31
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Ear/Tilt Position/Area Scan (11x6x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.301 mW/g

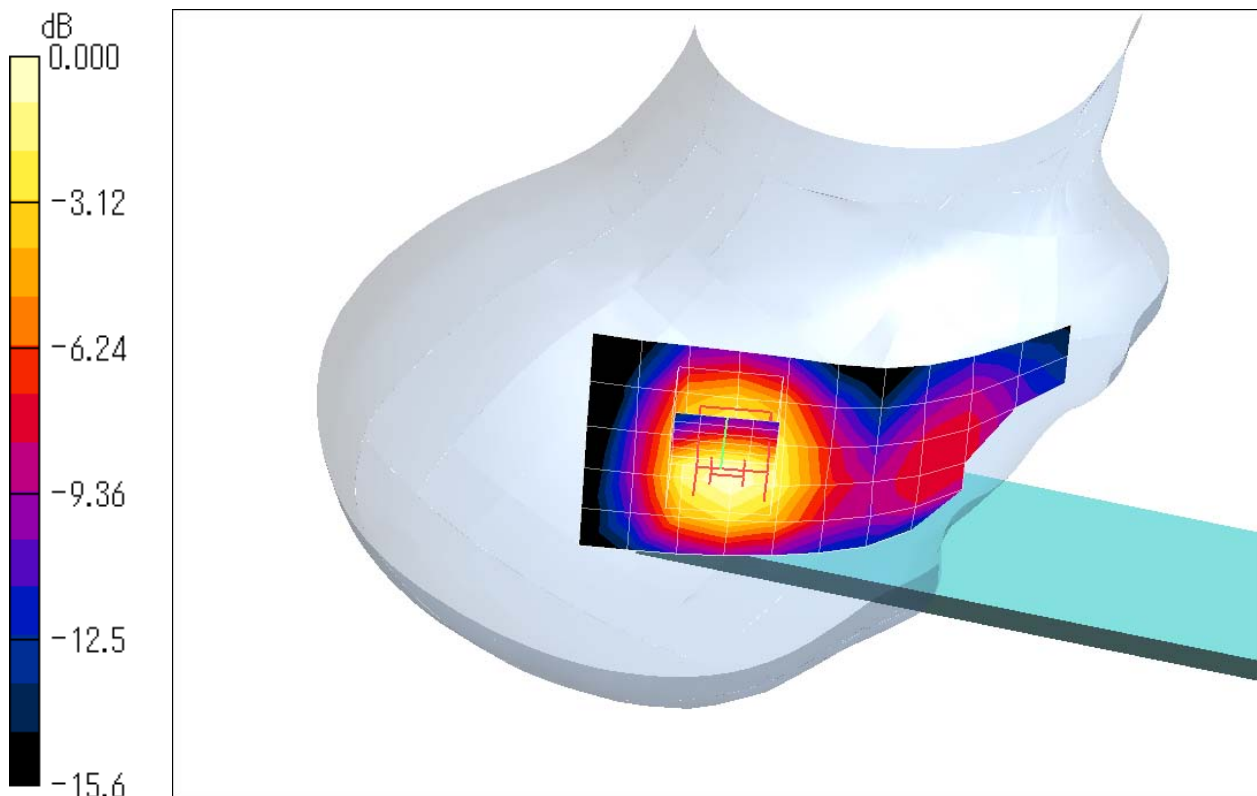
Ear/Tilt Position/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.2 V/m; Power Drift = -0.060 dB

Peak SAR (extrapolated) = 0.406 W/kg

SAR(1 g) = 0.279 mW/g; SAR(10 g) = 0.174 mW/g

Maximum value of SAR (measured) = 0.304 mW/g



0 dB = 0.304mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body-worn 661ch (1880.0MHz)**DUT: Cellular Phone; Type: 831SH; Serial: 004401/11/168289/0**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.54 \text{ mho/m}$; $\epsilon_r = 52.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1700; ConvF(4.67, 4.67, 4.67); Calibrated: 2008/10/21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2008/10/31
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn/Area Scan (6x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.227 mW/g

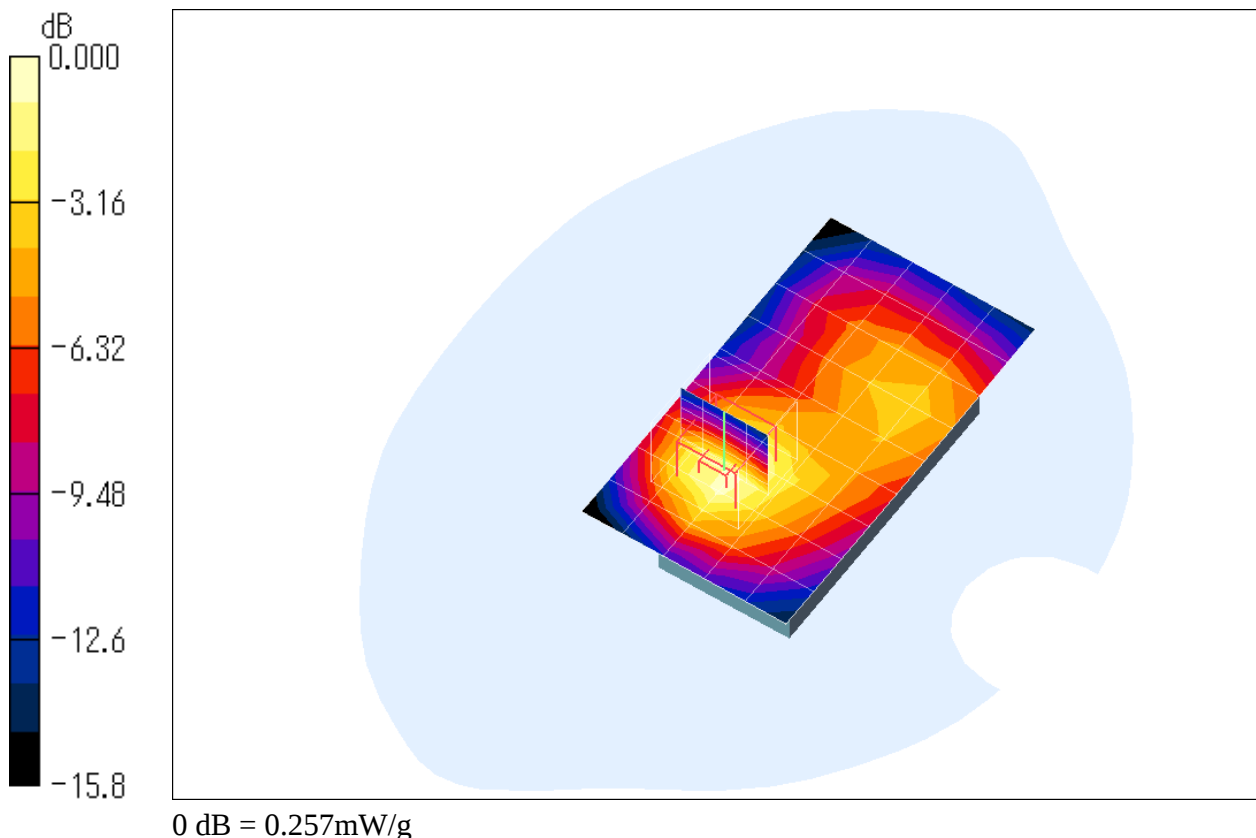
Body-worn/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.9 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.434 W/kg

SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.134 mW/g

Maximum value of SAR (measured) = 0.257 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body-worn 512ch (1850.2MHz) - GPRS mode**DUT: Cellular Phone; Type: 831SH; Serial: 004401/11/168289/0**

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:4.15

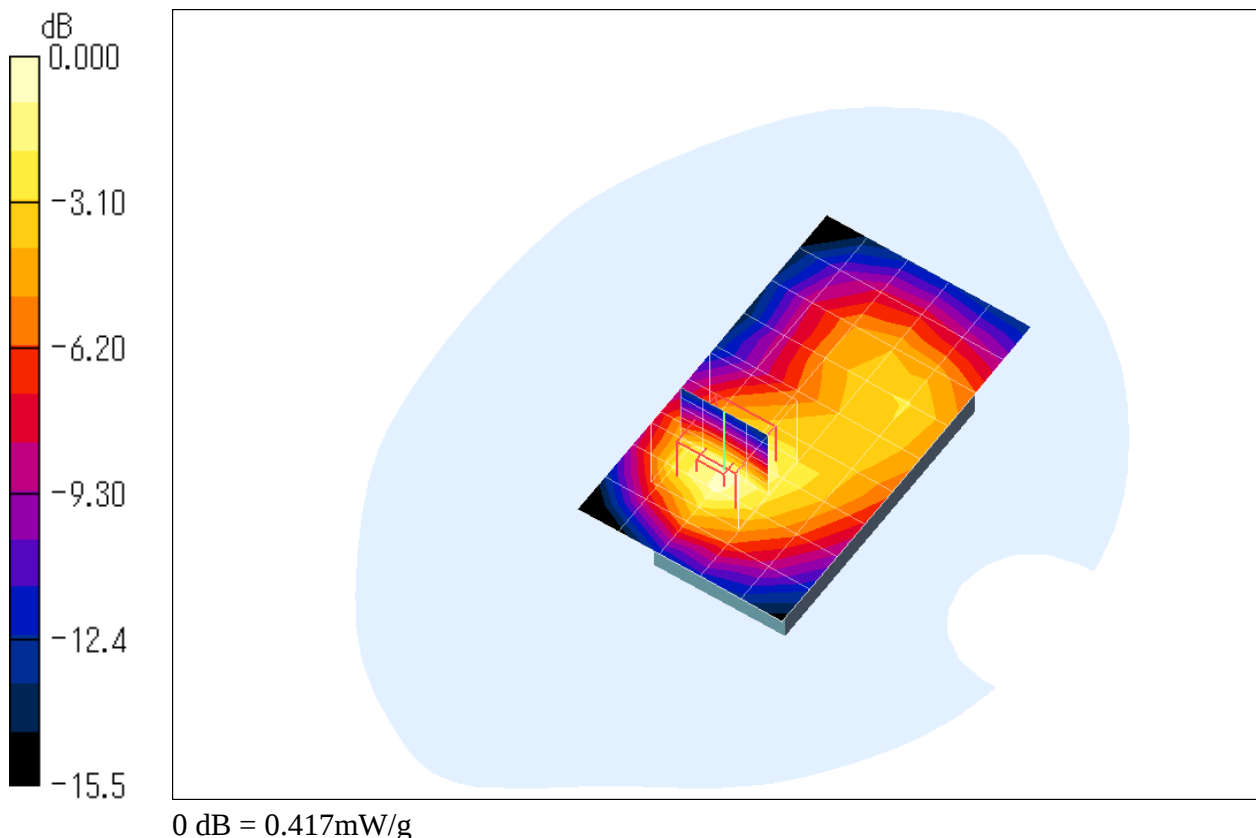
Medium: M1900 Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.54 \text{ mho/m}$; $\epsilon_r = 52.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1700; ConvF(4.67, 4.67, 4.67); Calibrated: 2008/10/21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2008/10/31
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn/Area Scan (6x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$ Maximum value of SAR (measured) = 0.370 mW/g **Body-worn/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$ Reference Value = 15.5 V/m ; Power Drift = -0.049 dB Peak SAR (extrapolated) = 0.693 W/kg **SAR(1 g) = 0.382 mW/g ; SAR(10 g) = 0.216 mW/g** Maximum value of SAR (measured) = 0.417 mW/g 

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body-worn 661ch (1880.0MHz) - GPRS mode**DUT: Cellular Phone; Type: 831SH; Serial: 004401/11/168289/0**

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:4.15

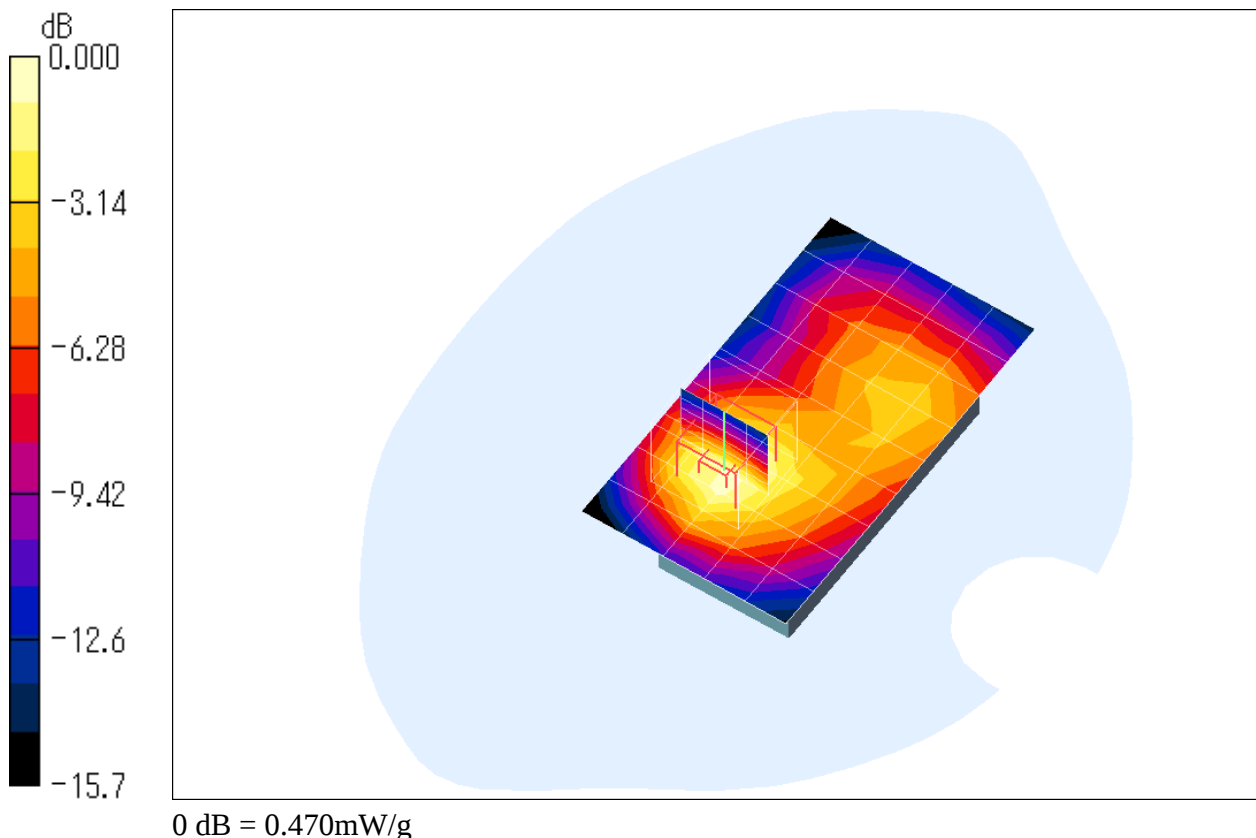
Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.54 \text{ mho/m}$; $\epsilon_r = 52.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1700; ConvF(4.67, 4.67, 4.67); Calibrated: 2008/10/21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2008/10/31
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn/Area Scan (6x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$ Maximum value of SAR (measured) = 0.421 mW/g **Body-worn/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$ Reference Value = 16.3 V/m ; Power Drift = -0.005 dB Peak SAR (extrapolated) = 0.782 W/kg **SAR(1 g) = 0.432 mW/g ; SAR(10 g) = 0.245 mW/g** Maximum value of SAR (measured) = 0.470 mW/g 

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body-worn 810ch (1909.8MHz) - GPRS mode**DUT: Cellular Phone; Type: 831SH; Serial: 004401/11/168289/0**

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4.15

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.54 \text{ mho/m}$; $\epsilon_r = 52.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1700; ConvF(4.67, 4.67, 4.67); Calibrated: 2008/10/21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2008/10/31
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn/Area Scan (6x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.442 mW/g

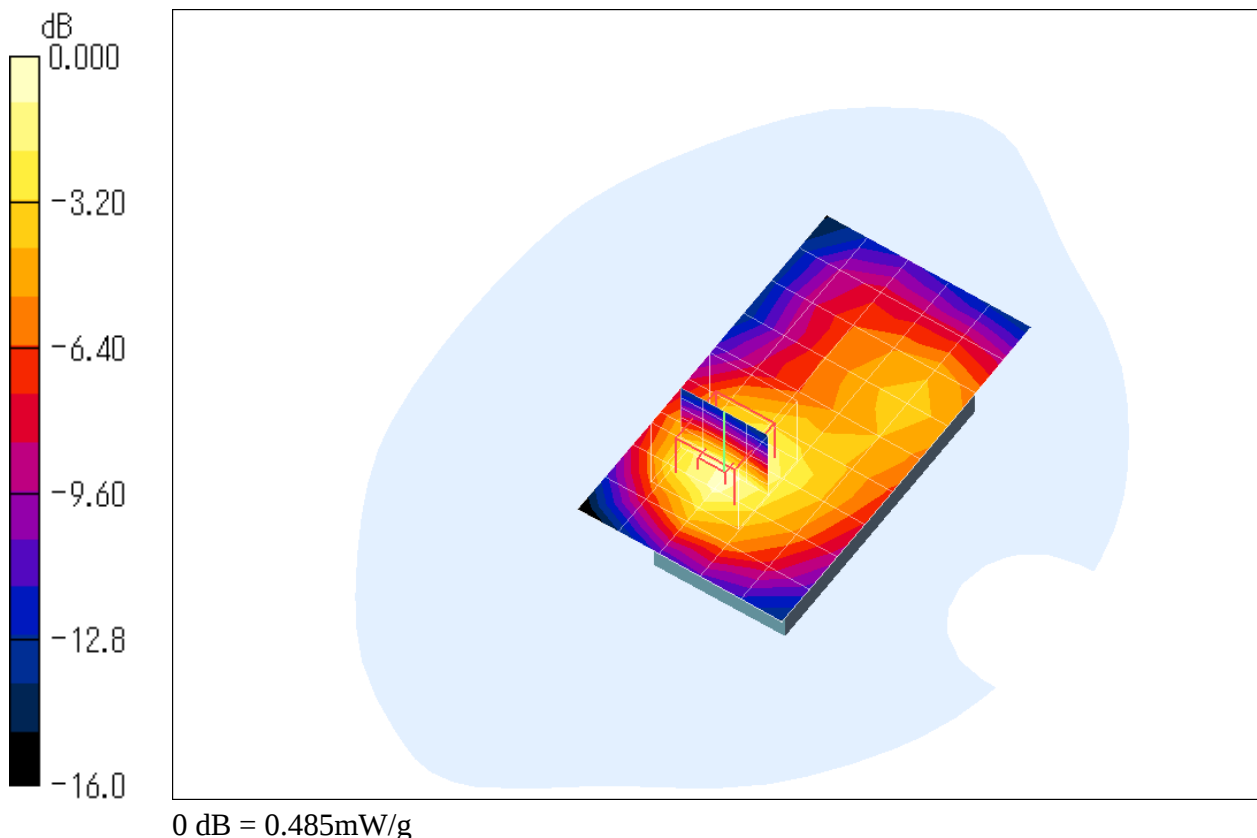
Body-worn/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.0 V/m; Power Drift = -0.068 dB

Peak SAR (extrapolated) = 0.842 W/kg

SAR(1 g) = 0.450 mW/g; SAR(10 g) = 0.255 mW/g

Maximum value of SAR (measured) = 0.485 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body-worn 810ch (1909.8MHz) - GPRS mode**DUT: Cellular Phone; Type: 831SH; Serial: 004401/11/168289/0**

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4.15

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.54 \text{ mho/m}$; $\epsilon_r = 52.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DAS4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1700; ConvF(4.67, 4.67, 4.67); Calibrated: 2008/10/21
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn508; Calibrated: 2008/10/31
- Phantom: SAM 1200; Type: QD 000 P40 CA; Serial: 1200
- Measurement SW: DAS4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body-worn/Z Scan (1x1x45): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=2.5\text{mm}$

Maximum value of SAR (measured) = 0.473 mW/g

