

APPENDIX A – SAR TEST PLOTS

Test Laboratory: HCT

Channel : 1

Battery Type: Energizer

Liquid Temperature : 21.6℃

Date Tested : March 10, 2007

DUT: GMRS672 (FACE); Type: Bar; Serial: #1

Communication System: 450MHz (FCC); Frequency: 462.563 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 462.563 \text{ MHz}$; $\sigma = 0.87 \text{ mho/m}$; $\epsilon_r = 45.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.82, 6.82, 6.82); Calibrated: 2006-03-23

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn466; Calibrated: 2007-01-25

- Phantom: SAM 1800/1900 MHz; Type: SAM

GMRS 450 Face 1/Area Scan (51x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.272 mW/g

GMRS 450 Face 1/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

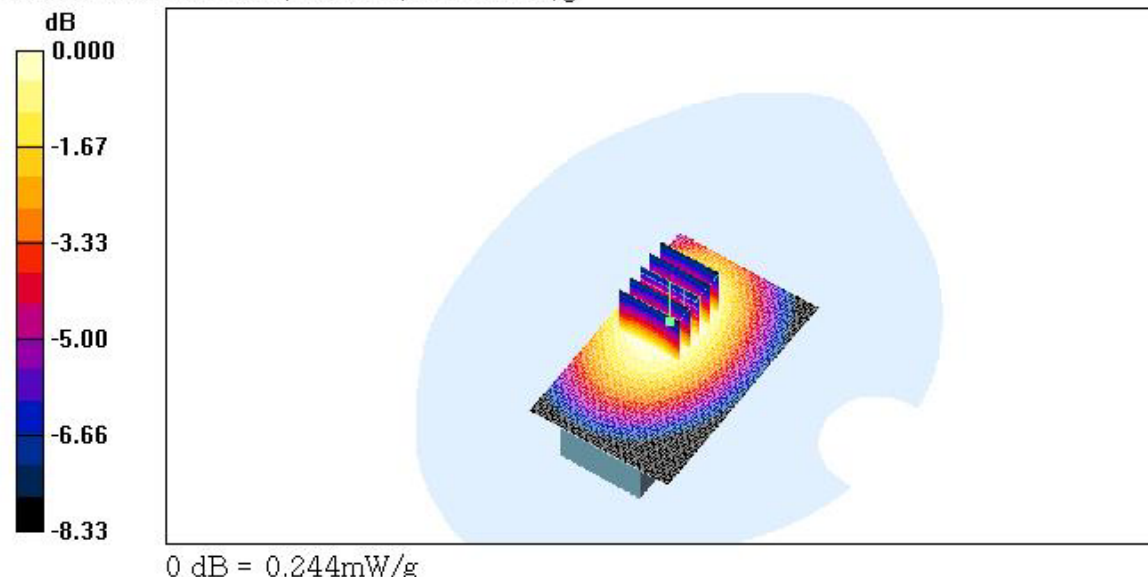
Reference Value = 18.0 V/m; Power Drift = -0.783 dB

Peak SAR (extrapolated) = 0.305 W/kg

SAR(1 g) = 0.231 mW/g; SAR(10 g) = 0.169 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.244 mW/g



Test Laboratory: HCT

Channel : 15

Battery Type: Energizer

Liquid Temperature : 21.6℃

Date Tested : March 10, 2007

DUT: GMRS672 (FACE); Type: Bar; Serial: #1

Communication System: 450MHz (FCC); Frequency: 462.55 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 462.55 \text{ MHz}$; $\sigma = 0.87 \text{ mho/m}$; $\epsilon_r = 45.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.82, 6.82, 6.82); Calibrated: 2006-03-23

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn466; Calibrated: 2007-01-25

- Phantom: SAM 1800/1900 MHz; Type: SAM

GMRS 450 Face 15/Area Scan (51x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.251 mW/g

GMRS 450 Face 15/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

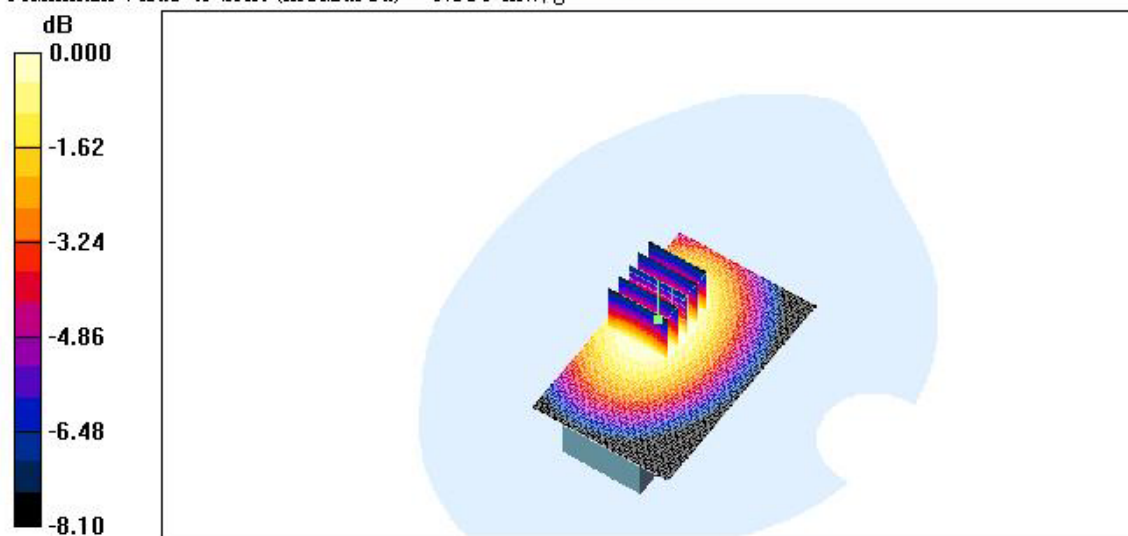
Reference Value = 16.6 V/m; Power Drift = -0.743 dB

Peak SAR (extrapolated) = 0.279 W/kg

SAR(1 g) = 0.213 mW/g; SAR(10 g) = 0.157 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

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



Test Laboratory: HCT

Channel : 22

Battery Type: Energizer

Liquid Temperature : 21.6℃

Date Tested : March 10, 2007

DUT: GMRS672 (FACE); Type: Bar; Serial: #1

Communication System: 450MHz (FCC); Frequency: 462.725 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 462.725 \text{ MHz}$; $\sigma = 0.87 \text{ mho/m}$; $\epsilon_r = 45.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.82, 6.82, 6.82); Calibrated: 2006-03-23

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn466; Calibrated: 2007-01-25

- Phantom: SAM 1800/1900 MHz; Type: SAM

GMRS 450 Face 22/Area Scan (51x81x1): Measurement grid: $\Delta x = 15\text{mm}$, $\Delta y = 15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.253 mW/g

GMRS 450 Face 22/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $\Delta x = 8\text{mm}$, $\Delta y = 8\text{mm}$, $\Delta z = 5\text{mm}$

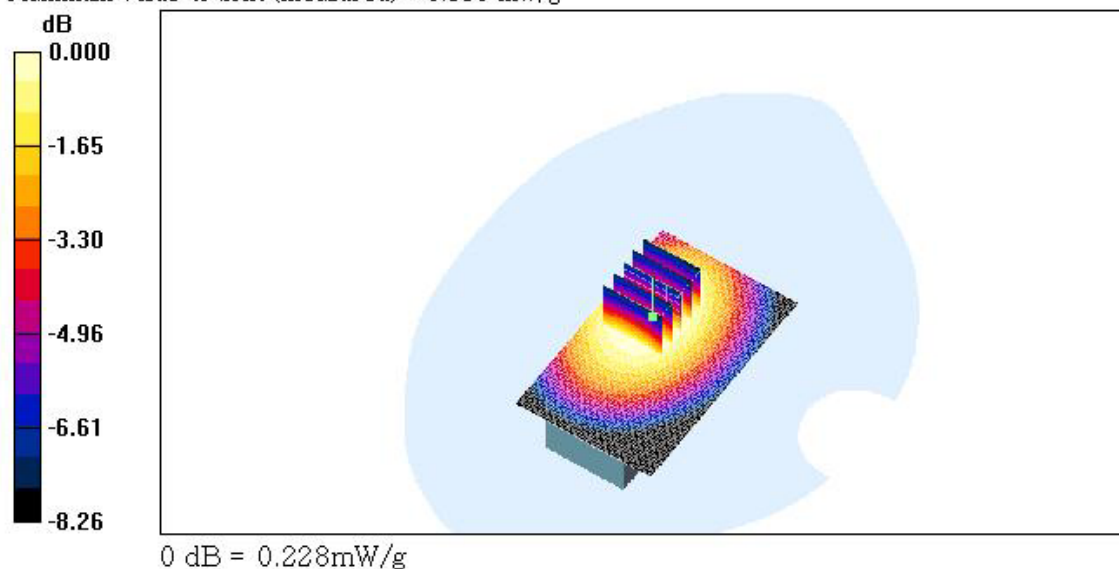
Reference Value = 17.3 V/m; Power Drift = -0.748 dB

Peak SAR (extrapolated) = 0.284 W/kg

SAR(1 g) = 0.216 mW/g; SAR(10 g) = 0.159 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

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



Test Laboratory: HCT

Channel : 8(FRS)

Battery Type: Energizer

Liquid Temperature : 21.6℃

Date Tested : March 10, 2007

DUT: GMRS672 (FACE); Type: Bar; Serial: #1

Communication System: 450MHz (FCC); Frequency: 467.563 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 467.563 \text{ MHz}$; $\sigma = 0.878 \text{ mho/m}$; $\epsilon_r = 45.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.82, 6.82, 6.82); Calibrated: 2006-03-23

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn466; Calibrated: 2007-01-25

- Phantom: SAM 1800/1900 MHz; Type: SAM

GMRS 450 Face 8/Area Scan (51x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

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

GMRS 450 Face 8/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

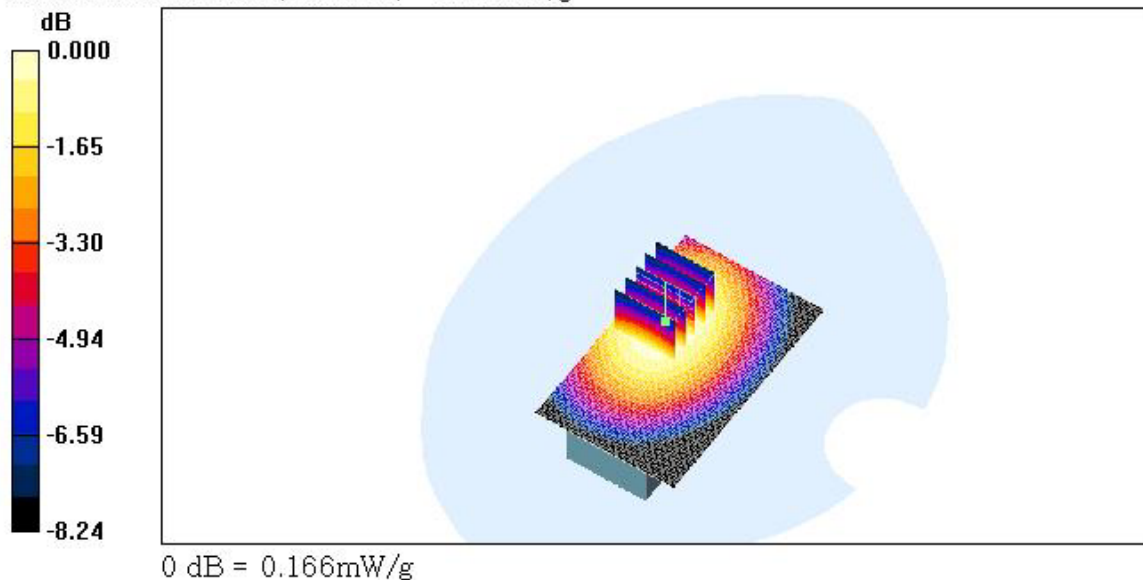
Reference Value = 13.9 V/m; Power Drift = -0.296 dB

Peak SAR (extrapolated) = 0.206 W/kg

SAR(1 g) = 0.157 mW/g; SAR(10 g) = 0.116 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

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



Test Laboratory: HCT

Channel : 1

Battery Type: Duracell

Liquid Temperature : 21.6℃

Date Tested : March 10, 2007

DUT: GMRS672 (FACE); Type: Bar; Serial: #1

Communication System: 450MHz (FCC); Frequency: 462.563 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 462.563 \text{ MHz}$; $\sigma = 0.87 \text{ mho/m}$; $\epsilon_r = 45.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.82, 6.82, 6.82); Calibrated: 2006-03-23

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn466; Calibrated: 2007-01-25

- Phantom: SAM 1800/1900 MHz; Type: SAM

GMRS 450 Face 1/Area Scan (51x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

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

GMRS 450 Face 1/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

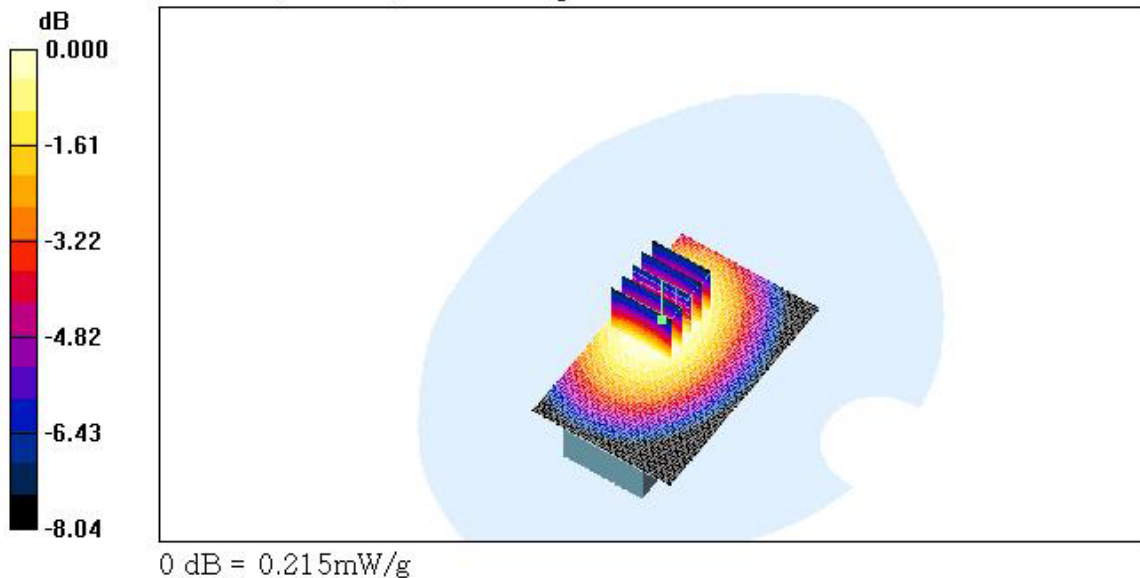
Reference Value = 16.1 V/m; Power Drift = -0.647 dB

Peak SAR (extrapolated) = 0.266 W/kg

SAR(1 g) = 0.204 mW/g; SAR(10 g) = 0.151 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.215 mW/g



Test Laboratory: HCT

Channel : 1

Battery Type: Bixel

Liquid Temperature : 21.6℃

Date Tested : March 10, 2007

DUT: GMRS672 (FACE); Type: Bar; Serial: #1

Communication System: 450MHz (FCC); Frequency: 462.563 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 462.563 \text{ MHz}$; $\sigma = 0.87 \text{ mho/m}$; $\epsilon_r = 45.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.82, 6.82, 6.82); Calibrated: 2006-03-23

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn466; Calibrated: 2007-01-25

- Phantom: SAM 1800/1900 MHz; Type: SAM

GMRS 450 Face 1/Area Scan (51x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.232 mW/g

GMRS 450 Face 1/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

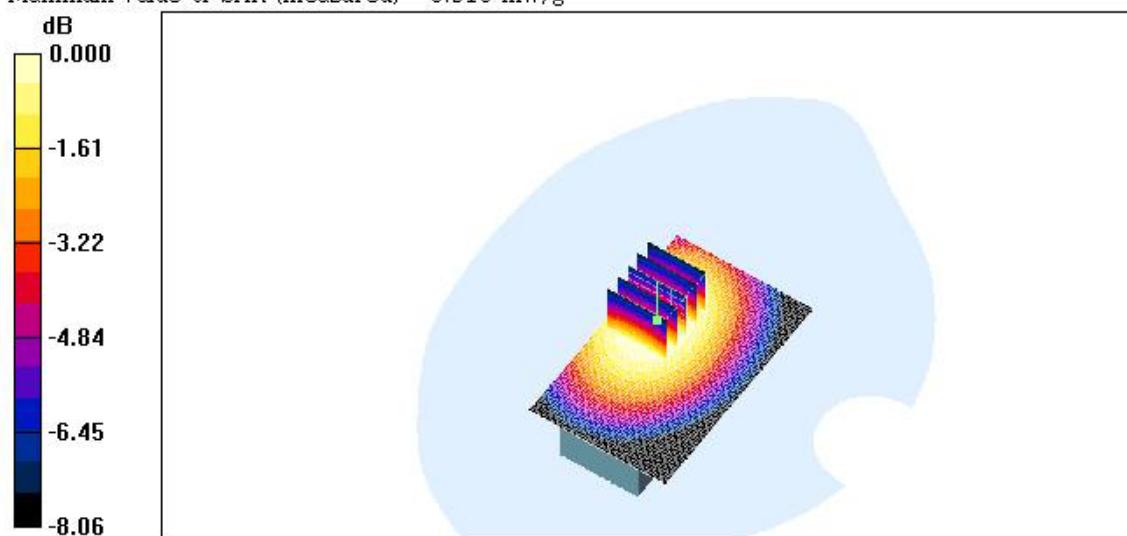
Reference Value = 16.0 V/m; Power Drift = -0.619 dB

Peak SAR (extrapolated) = 0.260 W/kg

SAR(1 g) = 0.199 mW/g; SAR(10 g) = 0.147 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.210 mW/g



0 dB = 0.210mW/g

Test Laboratory: HCT

Channel : 1

Battery Type: Rechargeable

Liquid Temperature : 21.6℃

Date Tested : March 10, 2007

DUT: GMRS672 (FACE); Type: Bar; Serial: #1

Communication System: 450MHz (FCC); Frequency: 462.563 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 462.563 \text{ MHz}$; $\sigma = 0.87 \text{ mho/m}$; $\epsilon_r = 45.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.82, 6.82, 6.82); Calibrated: 2006-03-23

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn466; Calibrated: 2007-01-25

- Phantom: SAM 1800/1900 MHz; Type: SAM

GMRS 450 Face 1/Area Scan (51x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Info: Interpolated medium parameters used for SAR evaluation.

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

GMRS 450 Face 1/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

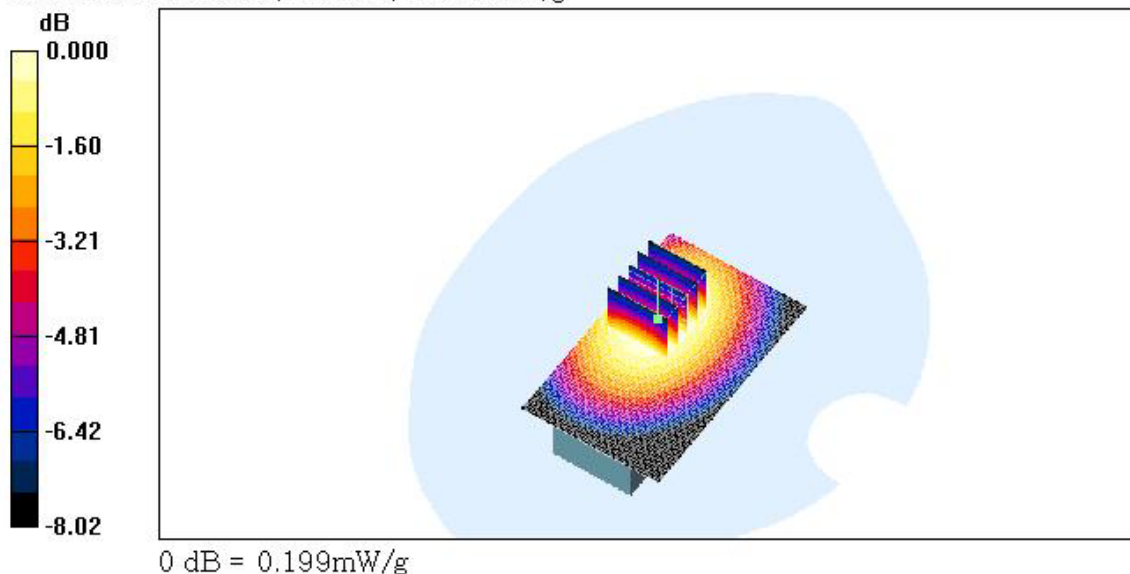
Reference Value = 15.7 V/m; Power Drift = -0.415 dB

Peak SAR (extrapolated) = 0.247 W/kg

SAR(1 g) = 0.190 mW/g; SAR(10 g) = 0.140 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

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



Test Laboratory: HCT

Channel : 1

Battery Type: Energizer

Liquid Temperature : 21.6 °C

Date Tested : March 10, 2007

DUT: GMRS672 (FACE); Type: Bar; Serial: #1

Communication System: 450MHz (FCC); Frequency: 462.563 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 462.563$ MHz; $\sigma = 0.87$ mho/m; $\epsilon_r = 45.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.82, 6.82, 6.82); Calibrated: 2006-03-23

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn466; Calibrated: 2007-01-25

- Phantom: SAM 1800/1900 MHz; Type: SAM

GMRS 450 Face 1/Area Scan (41x41x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.273 mW/g

GMRS 450 Face 1/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

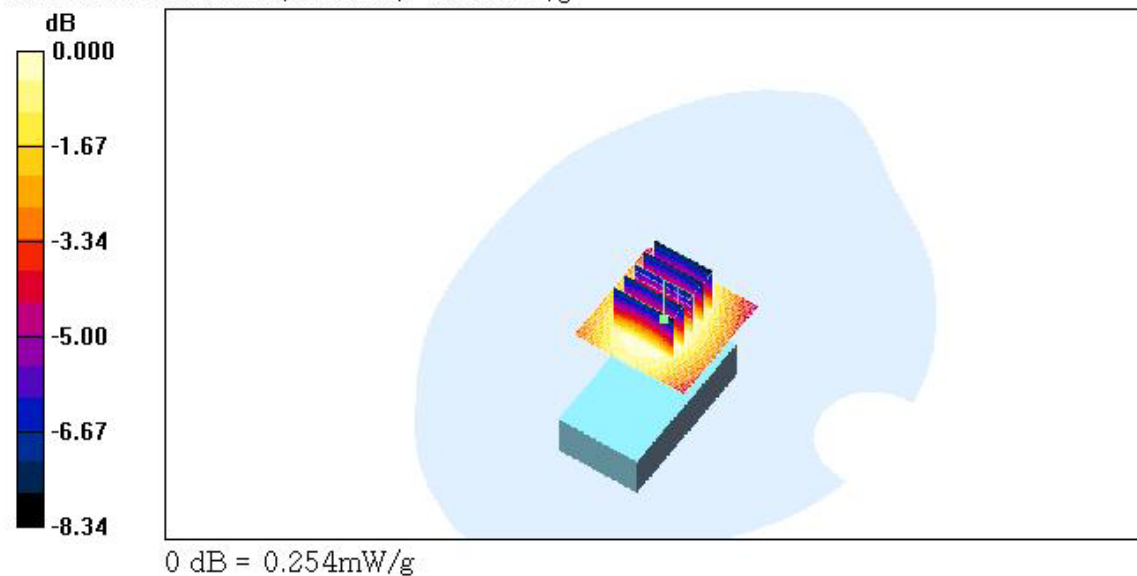
Reference Value = 17.6 V/m; Power Drift = -0.523 dB

Peak SAR (extrapolated) = 0.317 W/kg

SAR(1 g) = 0.240 mW/g; SAR(10 g) = 0.176 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.254 mW/g



Test Laboratory: HCT

Channel : 1

Battery Type: Energizer

Liquid Temperature : 21.6℃

Date Tested : March 10, 2007

DUT: GMRS672 (FACE); Type: Bar; Serial: #1

Communication System: 450MHz (FCC); Frequency: 462.563 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 462.563$ MHz; $\sigma = 0.87$ mho/m; $\epsilon_r = 45.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section ; Measurement SW: DASY4, V4.6 Build 23

DASY4 Configuration:

- Probe: ET3DV6 - SN1609; ConvF(6.82, 6.82, 6.82); Calibrated: 2006-03-23

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE3 Sn466; Calibrated: 2007-01-25

- Phantom: SAM 1800/1900 MHz; Type: SAM

GMRS 450 Face 1/Z Scan (1x1x31): Measurement grid: $dx=20$ mm, $dy=20$ mm, $dz=5$ mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.229 mW/g

