

SAMSUNG FCC ID : A3LSGHE490 GSM1900 HEAD SAR

DUT: SGH-E490; Serial: FD-199-B

Program Name: SGH-E490 GSM1900 Right (Job No. : FD-199)

Procedure Name: Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard

Meas. Ambient Temp(celsius)-21.9, Tissue Temp(celsius)-21.8 ;Test Date-11/Oct/2006

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.2$; $\rho = 1000$ kg/m³ ;

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.331 mW/g

Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0:

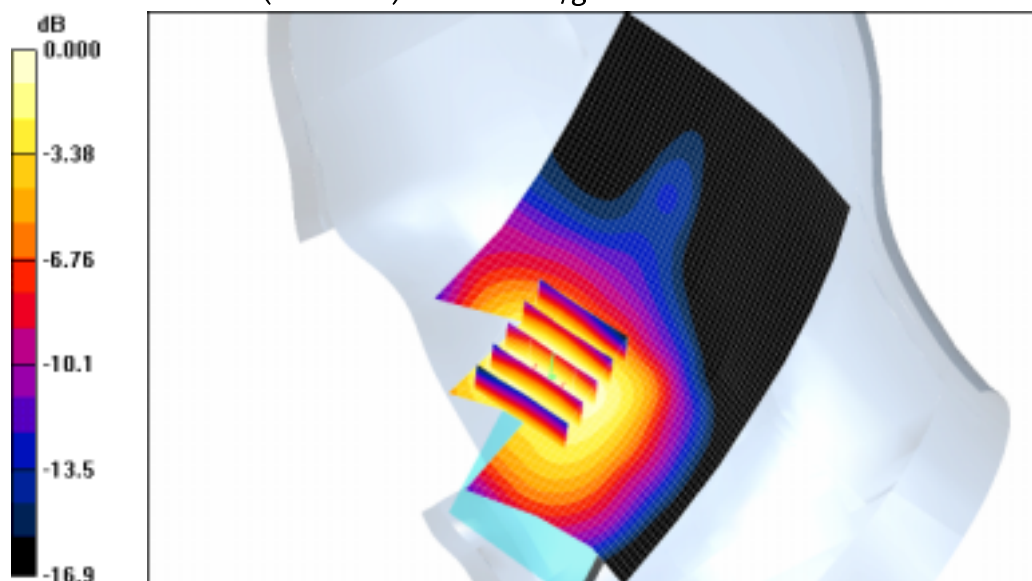
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.82 V/m; Power Drift = 0.113 dB

Peak SAR (extrapolated) = 0.398 W/kg

SAR(1 g) = 0.298 mW/g

Maximum value of SAR (measured) = 0.324 mW/g



0 dB = 0.324mW/g

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DUT: SGH-E490; Serial: FD-199-B

Program Name: SGH-E490 GSM1900 Right (Job No. : FD-199)

Procedure Name: Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard

Meas. Ambient Temp(celsius)-21.9, Tissue Temp(celsius)-21.8 ;Test Date-11/Oct/2006

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.2$; $\rho = 1000$ kg/m³ ;

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid:
dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.066 mW/g

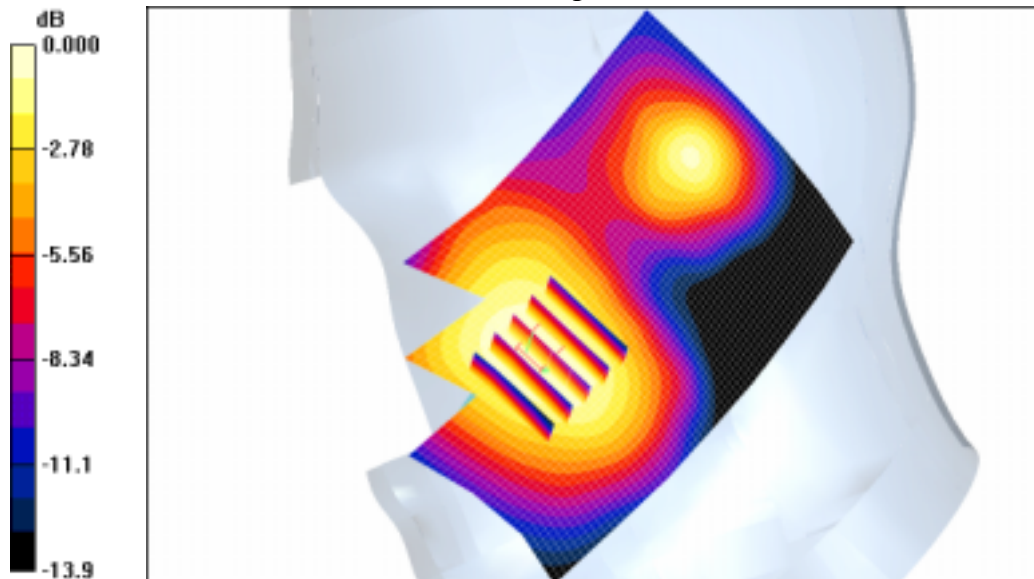
Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.10 V/m; Power Drift = 0.084 dB

Peak SAR (extrapolated) = 0.082 W/kg

SAR(1 g) = 0.059 mW/g

Maximum value of SAR (measured) = 0.062 mW/g



0 dB = 0.062mW/g

SAMSUNG FCC ID : A3LSGHE490 GSM1900 HEAD SAR

DUT: SGH-E490; Serial: FD-199-B

Program Name: SGH-E490 GSM1900 Left (Job No. : FD-199)

Procedure Name: Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard

Meas. Ambient Temp(celsius)-21.9, Tissue Temp(celsius)-21.8 ;Test Date-11/Oct/2006

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

Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 39.2$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.706 mW/g

Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0:

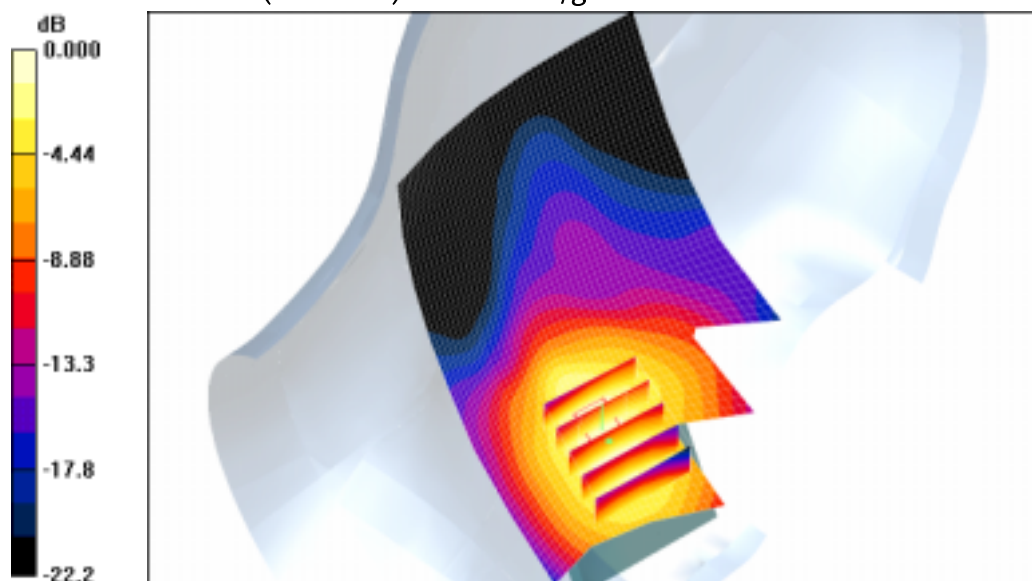
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.10 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.708 mW/g

Maximum value of SAR (measured) = 0.765 mW/g



0 dB = 0.765mW/g

SAMSUNG FCC ID : A3LSGHE490 GSM1900 HEAD SAR

DUT: SGH-E490; Serial: FD-199-B

Program Name: SGH-E490 GSM1900 Left (Job No. : FD-199)

Procedure Name: Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard

Meas. Ambient Temp(celsius)-21.9, Tissue Temp(celsius)-21.8 ;Test Date-11/Oct/2006

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.2$; $\rho = 1000$ kg/m³ ;

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid:
dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.065 mW/g

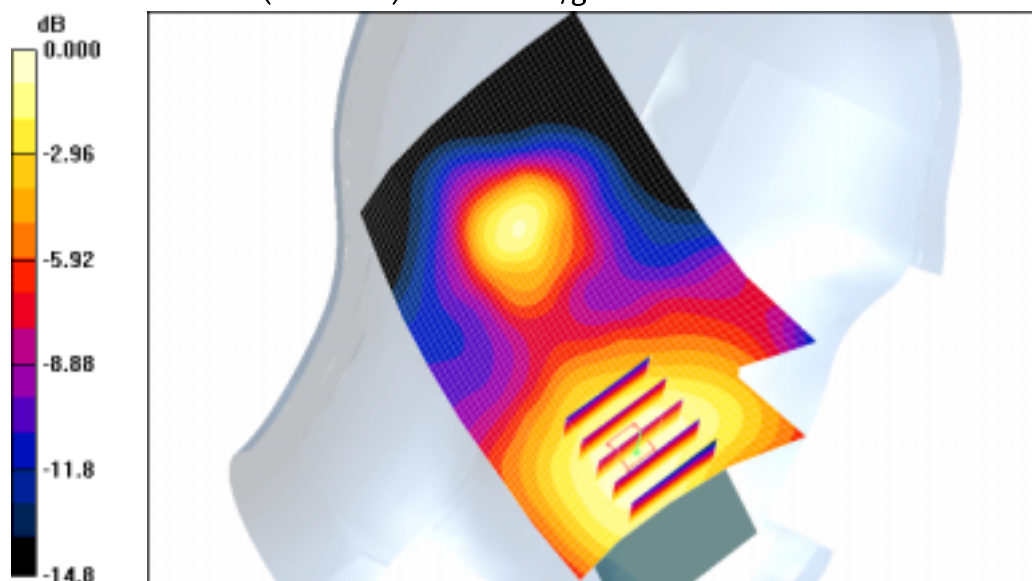
Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.97 V/m; Power Drift = 0.110 dB

Peak SAR (extrapolated) = 0.084 W/kg

SAR(1 g) = 0.060 mW/g

Maximum value of SAR (measured) = 0.064 mW/g

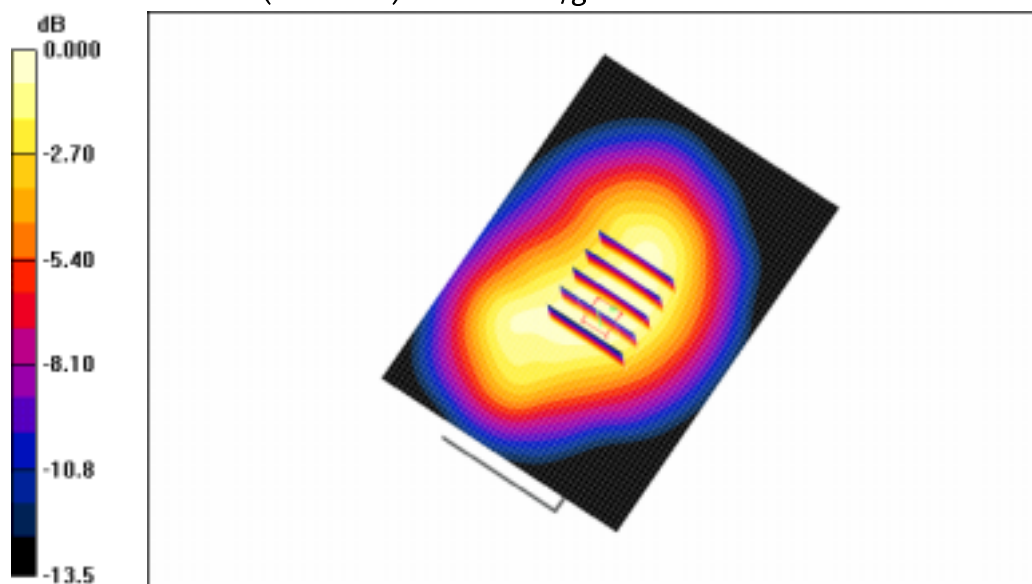


0 dB = 0.064mW/g

SAMSUNG FCC ID : A3LSGHE490 GPRS1900 Body SAR
 DUT: SGH-E490(Body); Serial: FD-199-B
 Program Name: SGH-E490 GSM1900 Body (Job No. : FD-199)
 Procedure Name: Body, Ch.512, Ant.Intenna, Bat.Standard With BT ON
 Meas. Ambient Temp(celsius)-22.0, Tissue Temp(celsius)-21.7; Test Date-11/Oct/2006
 Communication System: Body GPRS ; Frequency: 1850.2 MHz;Duty Cycle: 1:4.15
 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section
 DASY4 Configuration:
 - Probe: ES3DV3 - SN3085; ConvF(4.44, 4.44, 4.44); Calibrated: 2005-11-22
 - Sensor-Surface: 4mm (Mechanical Surface Detection)
 - Electronics: DAE3 Sn486; Calibrated: 2006-07-17
 - Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
 - Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body, Ch.512, Ant.Intenna, Bat.Standard With BT ON/Area Scan (51x71x1):
 Measurement grid: dx=20mm, dy=20mm
 Maximum value of SAR (interpolated) = 0.390 mW/g

Body, Ch.512, Ant.Intenna, Bat.Standard With BT ON/Zoom Scan (5x5x7)/Cube 0:
 Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 14.0 V/m; Power Drift = -0.058 dB
 Peak SAR (extrapolated) = 0.491 W/kg
 SAR(1 g) = 0.338 mW/g
 Maximum value of SAR (measured) = 0.364 mW/g



0 dB = 0.364mW/g

SAMSUNG FCC ID : A3LSGHE490 GSM1900 HEAD SAR

DUT: SGH-E490; Serial: FD-199-B

Program Name: SGH-E490 GSM1900 Left (Job No. : FD-199)

Procedure Name: Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard

Meas. Ambient Temp(celsius)-21.9, Tissue Temp(celsius)-21.8; Test Date-11/Oct/2006

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

Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.2$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.706 mW/g

Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0:

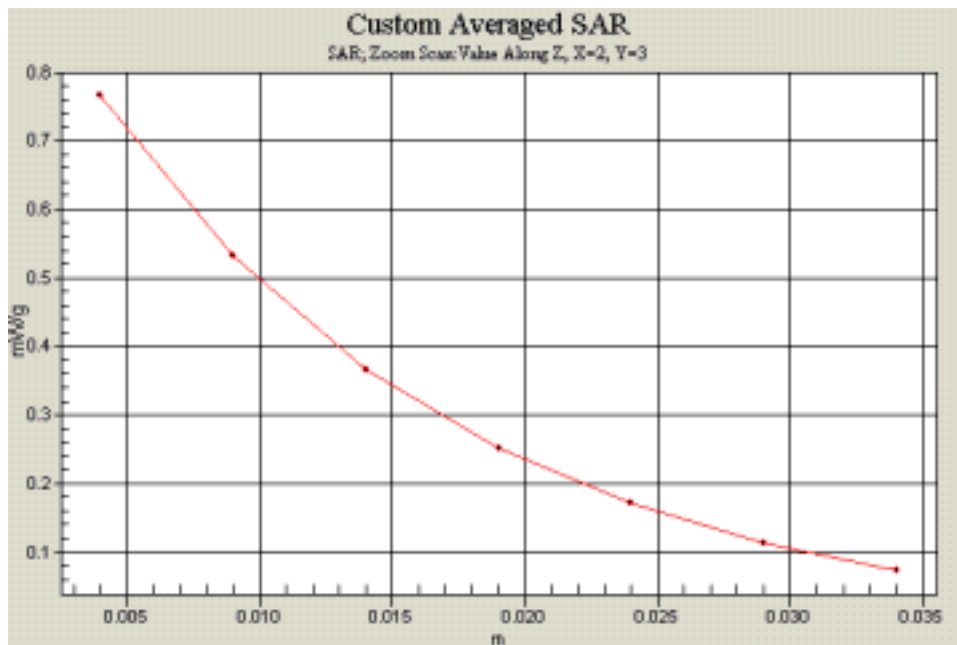
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.10 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.708 mW/g

Maximum value of SAR (measured) = 0.765 mW/g



SAMSUNG FCC ID : A3LSGHE490 GPRS1900 Body SAR
DUT: SGH-E490(Body); Serial: FD-199-B
Program Name: SGH-E490 GSM1900 Body (Job No. : FD-199)
Procedure Name: Body, Ch.512, Ant.Intenna, Bat.Standard With BT ON
Meas. Ambient Temp(celsius)-22.0, Tissue Temp(celsius)-21.7; Test Date-11/Oct/2006
Communication System: Body GPRS ; Frequency: 1850.2 MHz;Duty Cycle: 1:4.15
Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
DASY4 Configuration:
- Probe: ES3DV3 - SN3085; ConvF(4.44, 4.44, 4.44); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Body, Ch.512, Ant.Intenna, Bat.Standard With BT ON/Area Scan (51x71x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.390 mW/g

Body, Ch.512, Ant.Intenna, Bat.Standard With BT ON/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.0 V/m; Power Drift = -0.058 dB
Peak SAR (extrapolated) = 0.491 W/kg
SAR(1 g) = 0.338 mW/g
Maximum value of SAR (measured) = 0.364 mW/g

