# SAMSUNG FCC ID : A3LSGHE820N -- 1900MHz GSM1900 Head SAR

## DUT: SGH-E820N(Down); Serial: FB-072-C

**Program Name: SGH-E820N GSM1900 Right (Slide.Down, Job No.: FB-072)**
**Procedure Name: Cheek/Touch, Ch.512, Ant.Intenna Bat.Standard**
**Procedure Notes: Meas.Tissue Temp(celsius)-21.5; Test Date-28/Dec/2004 [OET Bulletin 65-Supplement C, July 2001]**

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1850.2 MHz; $\sigma$ = 1.4 mho/m; $\varepsilon_r$ = 39.6; $\rho$ = 1000 kg/m$^3$
Phantom section: Right Section

DASY4 Configuration:

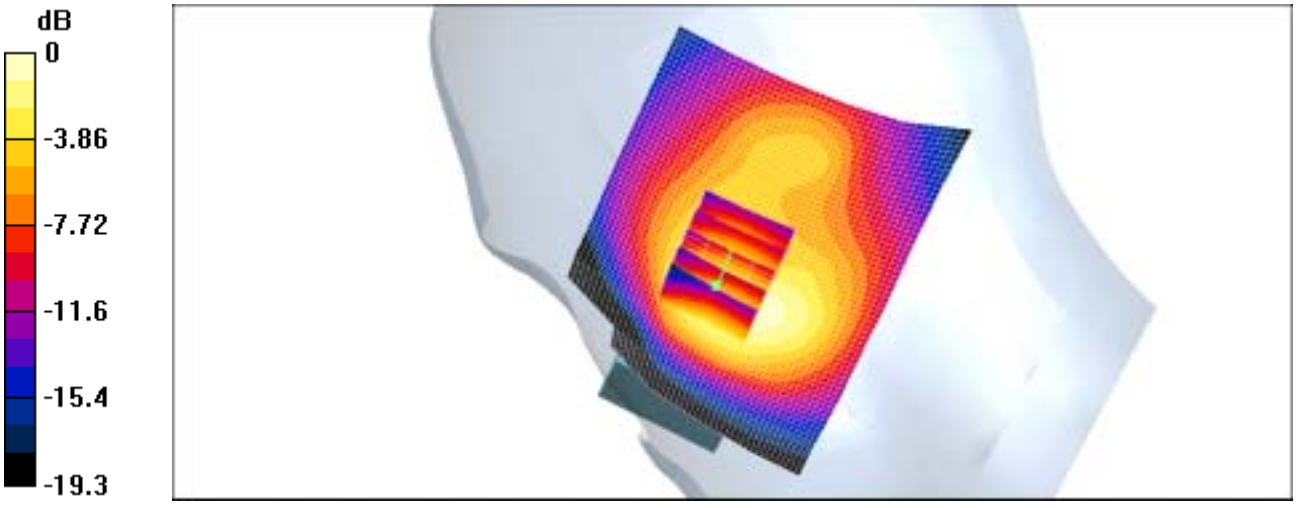
- Probe: ET3DV6 - SN1551; ConvF(5, 5, 5); Calibrated: 2004-04-27
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2004-08-23
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

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

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

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

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.9 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 0.251 W/kg
**SAR(1 g) = 0.196 mW/g**
Maximum value of SAR (measured) = 0.211 mW/g




0 dB = 0.211mW/g

# SAMSUNG FCC ID : A3LSGHE820N -- 1900MHz GSM1900 Head SAR

## DUT: SGH-E820N(Down); Serial: FB-072-C

**Program Name: SGH-E820N GSM1900 Right (Slide.Down, Job No.: FB-072)**
**Procedure Name: Tilted, Ch.661, Ant.Intenna Bat.Standard**
**Procedure Notes: Meas.Tissue Temp(celsius)-21.5; Test Date-28/Dec/2004 [OET Bulletin 65-Supplement C, July 2001]**

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.4 mho/m; $\varepsilon_r$ = 39.6; $\rho$ = 1000 kg/m$^3$
Phantom section: Right Section

DASY4 Configuration:

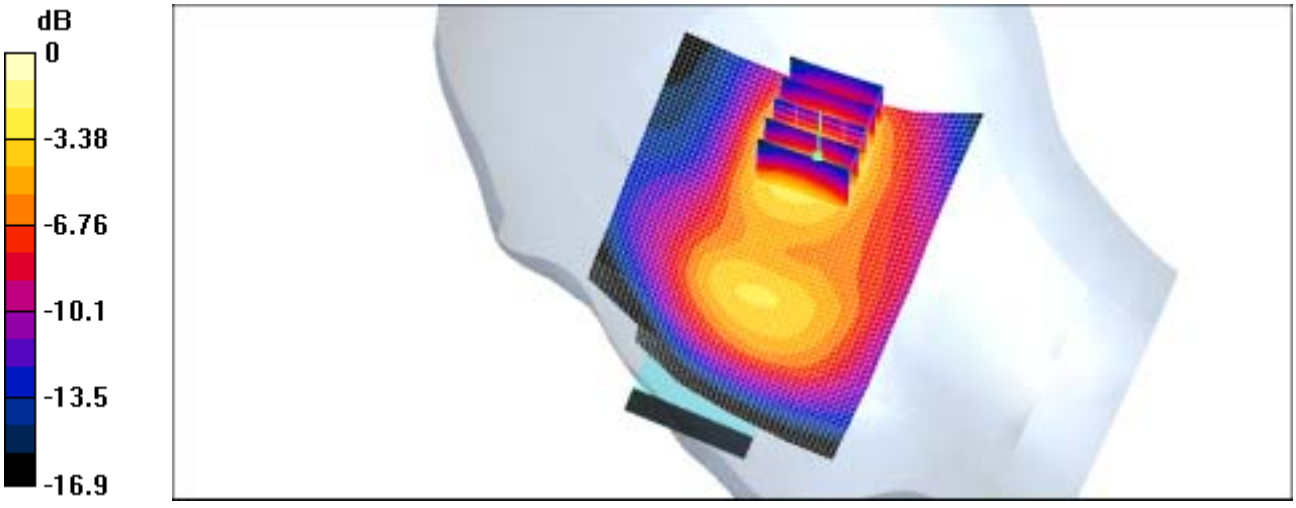
- Probe: ET3DV6 - SN1551; ConvF(5, 5, 5); Calibrated: 2004-04-27
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2004-08-23
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

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

Maximum value of SAR (interpolated) = 0.114 mW/g

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

Reference Value = 7.34 V/m; Power Drift = 0.0 dB
Peak SAR (extrapolated) = 0.188 W/kg
**SAR(1 g) = 0.121 mW/g**
Maximum value of SAR (measured) = 0.128 mW/g




0 dB = 0.128mW/g

# SAMSUNG FCC ID : A3LSGHE820N -- 1900MHz GSM1900 Head SAR

## DUT: SGH-E820N(Down); Serial: FB-072-C

**Program Name: SGH-E820N GSM1900 Left (Slide.Down, Job No.: FB-072)**
**Procedure Name: Cheek/Touch, Ch.512, Ant.Intenna Bat.Standard**
**Procedure Notes: Meas.Tissue Temp(celsius)-21.5; Test Date-28/Dec/2004 [OET Bulletin 65-Supplement C, July 2001]**

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1850.2 MHz; $\sigma$ = 1.4 mho/m; $\varepsilon_r$ = 39.6; $\rho$ = 1000 kg/m$^3$
Phantom section: Left Section

DASY4 Configuration:

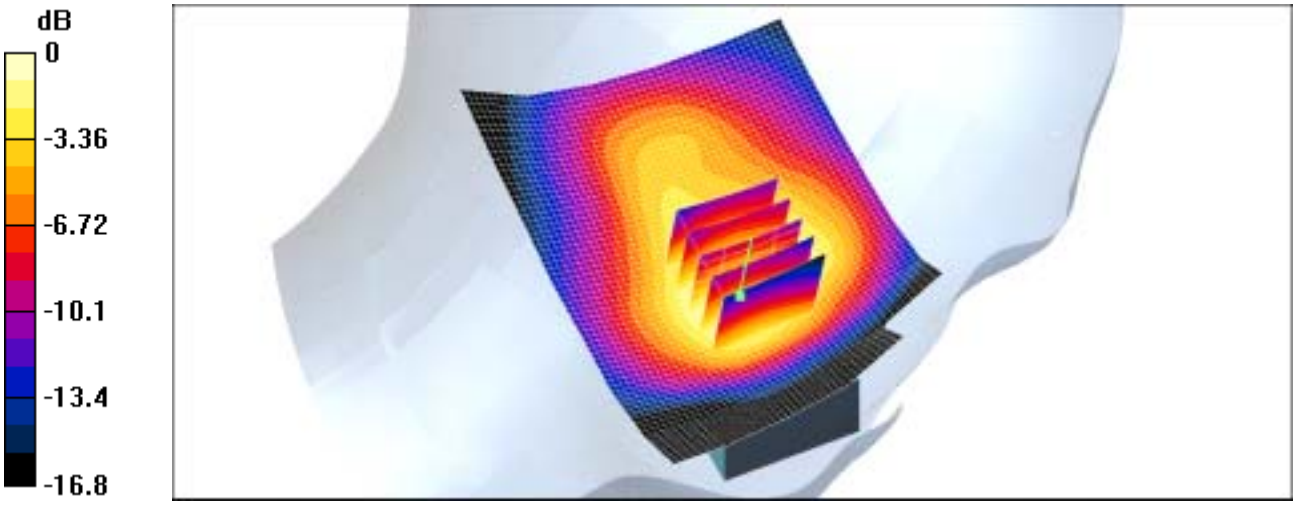
- Probe: ET3DV6 - SN1551; ConvF(5, 5, 5); Calibrated: 2004-04-27
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2004-08-23
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

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

Maximum value of SAR (interpolated) = 0.234 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 = 9.16 V/m; Power Drift = -0.0 dB
Peak SAR (extrapolated) = 0.250 W/kg
**SAR(1 g) = 0.202 mW/g**
Maximum value of SAR (measured) = 0.218 mW/g




0 dB = 0.218mW/g

# SAMSUNG FCC ID : A3LSGHE820N -- 1900MHz GSM1900 Head SAR

## DUT: SGH-E820N(Down); Serial: FB-072-C

**Program Name: SGH-E820N GSM1900 Left (Slide.Down, Job No.: FB-072)**
**Procedure Name: Tilted, Ch.661, Ant.Intenna Bat.Standard**
**Procedure Notes: Meas.Tissue Temp(celsius)-21.5; Test Date-28/Dec/2004 [OET Bulletin 65-Supplement C, July 2001]**

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.4 mho/m; $\varepsilon_r$ = 39.6; $\rho$ = 1000 kg/m$^3$
Phantom section: Left Section

DASY4 Configuration:

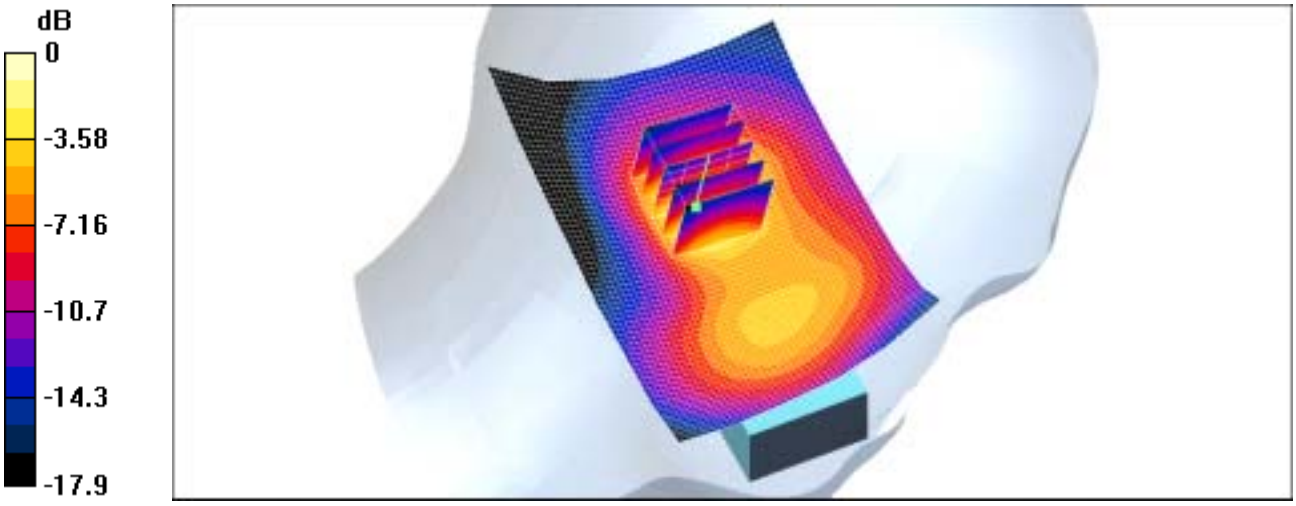
- Probe: ET3DV6 - SN1551; ConvF(5, 5, 5); Calibrated: 2004-04-27
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2004-08-23
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

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

Maximum value of SAR (interpolated) = 0.132 mW/g

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

Reference Value = 9.44 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 0.206 W/kg
**SAR(1 g) = 0.133 mW/g**
Maximum value of SAR (measured) = 0.152 mW/g




0 dB = 0.152mW/g

# SAMSUNG FCC ID : A3LSGHE820N -- 1900MHz GSM1900 Body SAR

## DUT: SGH-E820N(Down); Serial: FB-072-C

**Program Name: SGH-E820N GPRS1900 Body (Job No.: FB-072)**
**Procedure Name: Body, Ch. 512, Ant.Intenna, Bat.Standard**
**Procedure Notes: Meas.Tissue Temp(celsius)-20.9; Test Date-28/Dec/2004 [OET Bulletin 65-Supplement C, July 2001]**

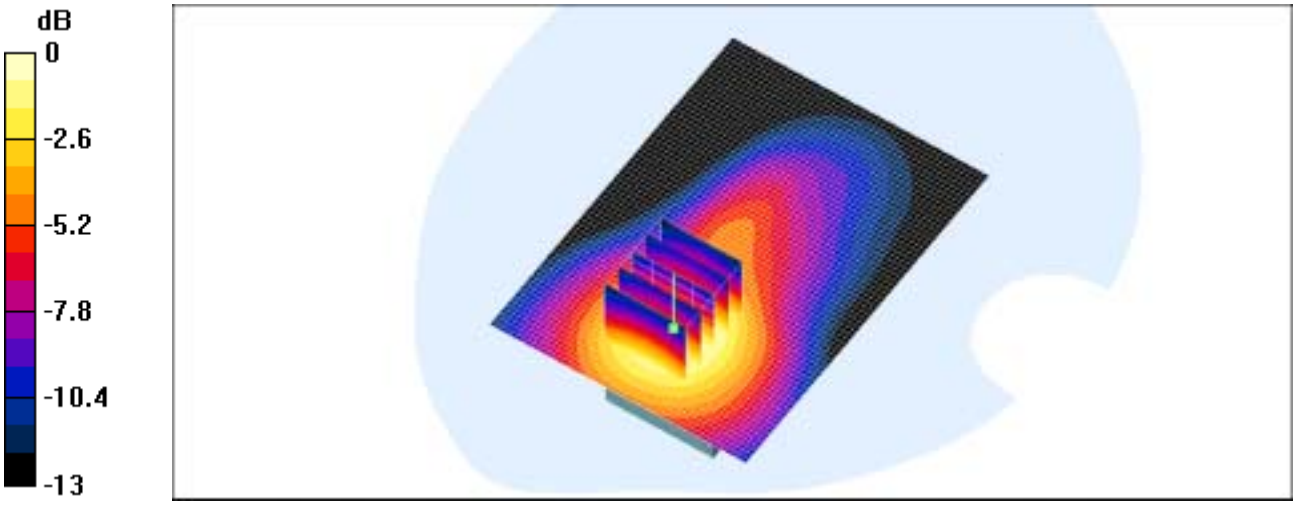
Communication System: Body GPRS ; Frequency: 1850.2 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 1850.2 MHz; $\sigma$ = 1.54 mho/m; $\varepsilon_r$ = 51.9; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1551; ConvF(4.51, 4.51, 4.51); Calibrated: 2004-04-27
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2004-08-23
- Phantom: SAM 1800/1900MHz; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

**Body, Ch. 512, Ant.Intenna, Bat.Standard/Area Scan (51x71x1):** Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.497 mW/g

**Body, Ch. 512, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.36 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 0.581 W/kg
**SAR(1 g) = 0.433 mW/g**
Maximum value of SAR (measured) = 0.470 mW/g




0 dB = 0.470mW/g

# SAMSUNG FCC ID : A3LSGHE820N -- 1900MHz GSM1900 Face SAR

## DUT: SGH-E820P(Down); Serial: FB-072-C

**Program Name: SGH-E820P GSM1900 Flat (Slide.Down, Job No.: FB-072)**
**Procedure Name: PTT, Ch.512, Ant.Intenna Bat.Standard**
**Procedure Notes: Meas.Tissue Temp(celsius)-21.5; Test Date-28/Dec/2004 [OET Bulletin 65-Supplement C, July 2001]**

Communication System: GSM1900 PTT; Frequency: 1850.2 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 1850.2 MHz; $\sigma$ = 1.4 mho/m; $\varepsilon_r$ = 39.6; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY4 Configuration:

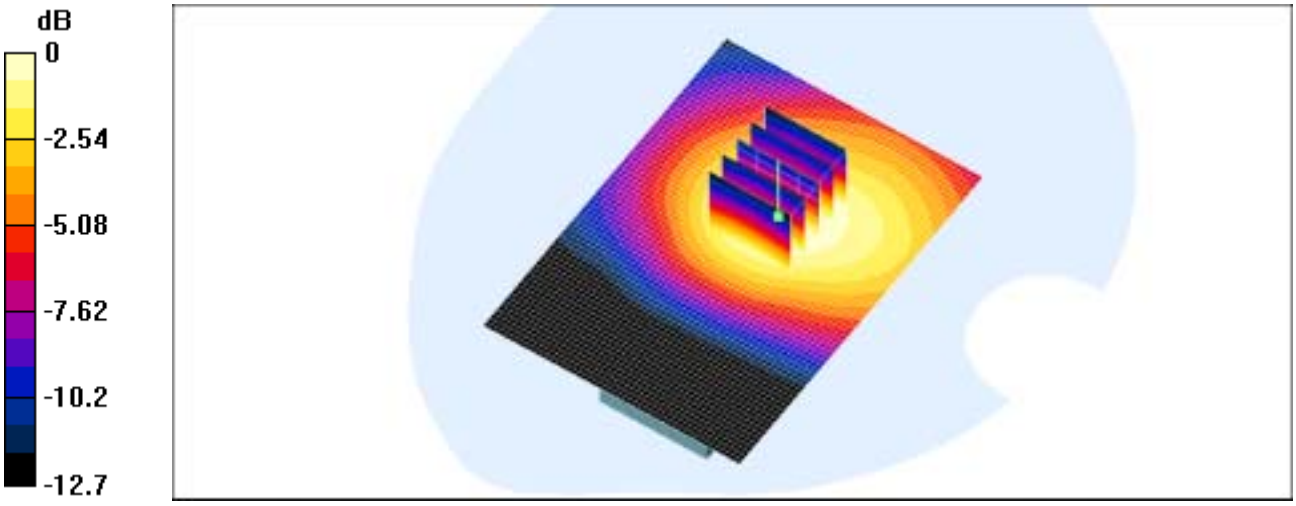
- Probe: ET3DV6 - SN1551; ConvF(5, 5, 5); Calibrated: 2004-04-27
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2004-08-23
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

## PTT, Ch.512, Ant.Intenna Bat.Standard/Area Scan (51x71x1): Measurement grid:

dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.083 mW/g

## PTT, Ch.512, Ant.Intenna Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.74 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 0.105 W/kg
**SAR(1 g) = 0.074 mW/g**
Maximum value of SAR (measured) = 0.080 mW/g




0 dB = 0.080mW/g

# SAMSUNG FCC ID : A3LSGHE820N -- 1900MHz GSM1900 Head SAR

## DUT: SGH-E820N(Down); Serial: FB-072-C

**Program Name: SGH-E820N GSM1900 Left (Slide.Down, Job No.: FB-072)**
**Procedure Name: Cheek/Touch, Ch.512, Ant.Intenna Bat.Standard**
**Procedure Notes: Meas.Tissue Temp(celsius)-21.5; Test Date-28/Dec/2004 [OET Bulletin 65-Supplement C, July 2001]**

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1850.2 MHz; $\sigma$ = 1.4 mho/m; $\varepsilon_r$ = 39.6; $\rho$ = 1000 kg/m$^3$
Phantom section: Left Section

DASY4 Configuration:

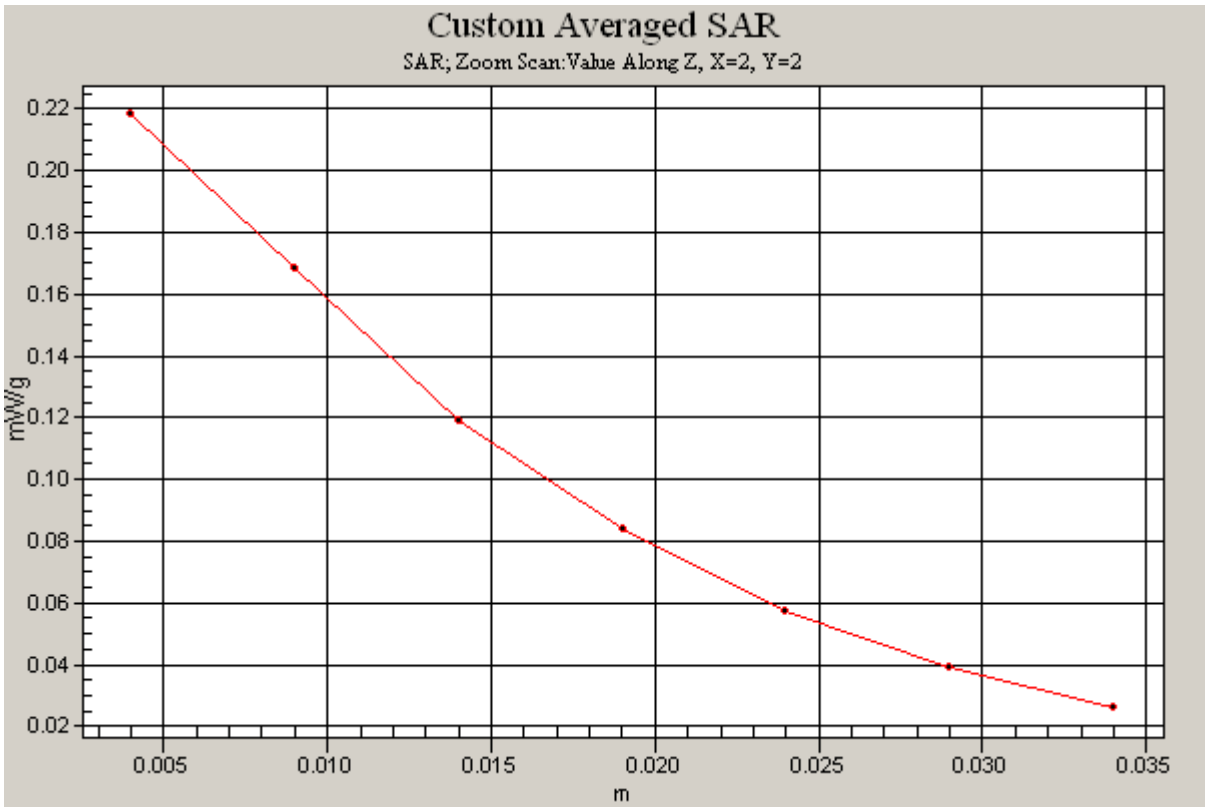
- Probe: ET3DV6 - SN1551; ConvF(5, 5, 5); Calibrated: 2004-04-27
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2004-08-23
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

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

Maximum value of SAR (interpolated) = 0.234 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 = 9.16 V/m; Power Drift = -0.0 dB
Peak SAR (extrapolated) = 0.250 W/kg
**SAR(1 g) = 0.202 mW/g**
Maximum value of SAR (measured) = 0.218 mW/g



# SAMSUNG FCC ID : A3LSGHE820N -- 1900MHz GSM1900 Body SAR

## DUT: SGH-E820N(Down); Serial: FB-072-C

**Program Name: SGH-E820N GPRS1900 Body (Job No.: FB-072)**
**Procedure Name: Body, Ch. 512, Ant.Intenna, Bat.Standard**
**Procedure Notes: Meas.Tissue Temp(celsius)-20.9; Test Date-28/Dec/2004 [OET Bulletin 65-Supplement C, July 2001]**

Communication System: Body GPRS ; Frequency: 1850.2 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 1850.2 MHz; $\sigma$ = 1.54 mho/m; $\varepsilon_r$ = 51.9; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY4 Configuration:

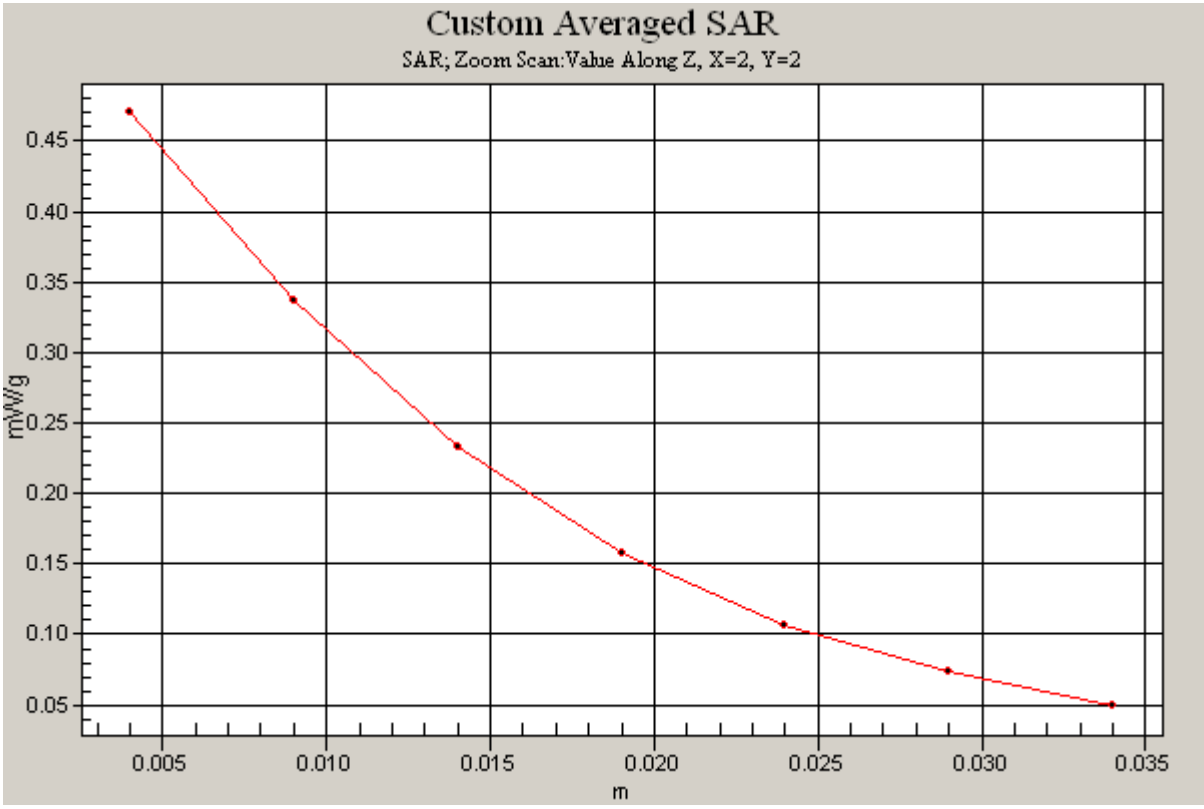
- Probe: ET3DV6 - SN1551; ConvF(4.51, 4.51, 4.51); Calibrated: 2004-04-27
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2004-08-23
- Phantom: SAM 1800/1900MHz; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

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

Maximum value of SAR (interpolated) = 0.497 mW/g

## Body, Ch. 512, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.36 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 0.581 W/kg
**SAR(1 g) = 0.433 mW/g**
Maximum value of SAR (measured) = 0.470 mW/g



# SAMSUNG FCC ID : A3LSGHE820N -- 1900MHz GSM1900 Face SAR

## DUT: SGH-E820P(Down); Serial: FB-072-C

**Program Name: SGH-E820P GSM1900 Flat (Slide.Down, Job No.: FB-072)**
**Procedure Name: PTT, Ch.512, Ant.Intenna Bat.Standard**
**Procedure Notes: Meas.Tissue Temp(celsius)-21.5; Test Date-28/Dec/2004 [OET Bulletin 65-Supplement C, July 2001]**

Communication System: GSM1900 PTT; Frequency: 1850.2 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 1850.2 MHz; $\sigma$ = 1.4 mho/m; $\varepsilon_r$ = 39.6; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1551; ConvF(5, 5, 5); Calibrated: 2004-04-27
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2004-08-23
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

## PTT, Ch.512, Ant.Intenna Bat.Standard/Area Scan (51x71x1): Measurement grid:

dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.083 mW/g

## PTT, Ch.512, Ant.Intenna Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.74 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 0.105 W/kg
**SAR(1 g) = 0.074 mW/g**
Maximum value of SAR (measured) = 0.080 mW/g