

Test Laboratory: UL CCS SAR Lab C

01_GSM1900

Communication System: GPRS-FDD (GMSK, 2 slot); Frequency: 1880 MHz; Duty Cycle: 1:4.00037
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.484$ mho/m; $\epsilon_r = 52.203$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3772; ConvF(6.76, 6.76, 6.76); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: ELI v4.0 (A); Type: QDOVA001BB; Serial: 1117
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Bottom Face _10 mm/GPRS 2 Slot_M-ch/Area Scan (101x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.538 mW/g

Bottom Face _10 mm/GPRS 2 Slot_M-ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

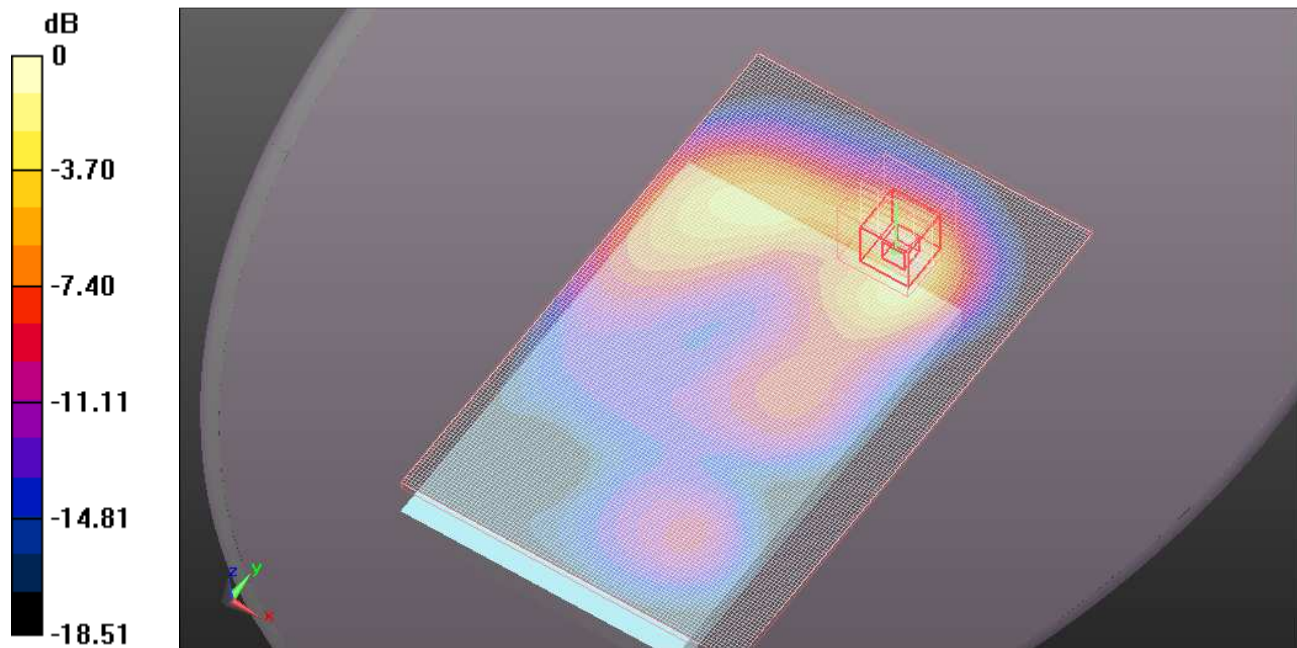
dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.023 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.713 W/kg

SAR(1 g) = 0.420 mW/g; SAR(10 g) = 0.230 mW/g

Maximum value of SAR (measured) = 0.555 mW/g



0 dB = 0.560mW/g

Test Laboratory: UL CCS SAR Lab C

01_GSM1900

Communication System: GPRS-FDD (GMSK, 2 slot); Frequency: 1880 MHz; Duty Cycle: 1:4.00037

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 51.017$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3772; ConvF(6.76, 6.76, 6.76); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: ELI v4.0 (A); Type: QDOVA001BB; Serial: 1117
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Secondary Landscape_5 mm/GPRS 2 Slot_M-ch/Area Scan (71x121x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.929 mW/g

Secondary Landscape_5 mm/GPRS 2 Slot_M-ch/Zoom Scan (5x5x7)/Cube 0: Measurement

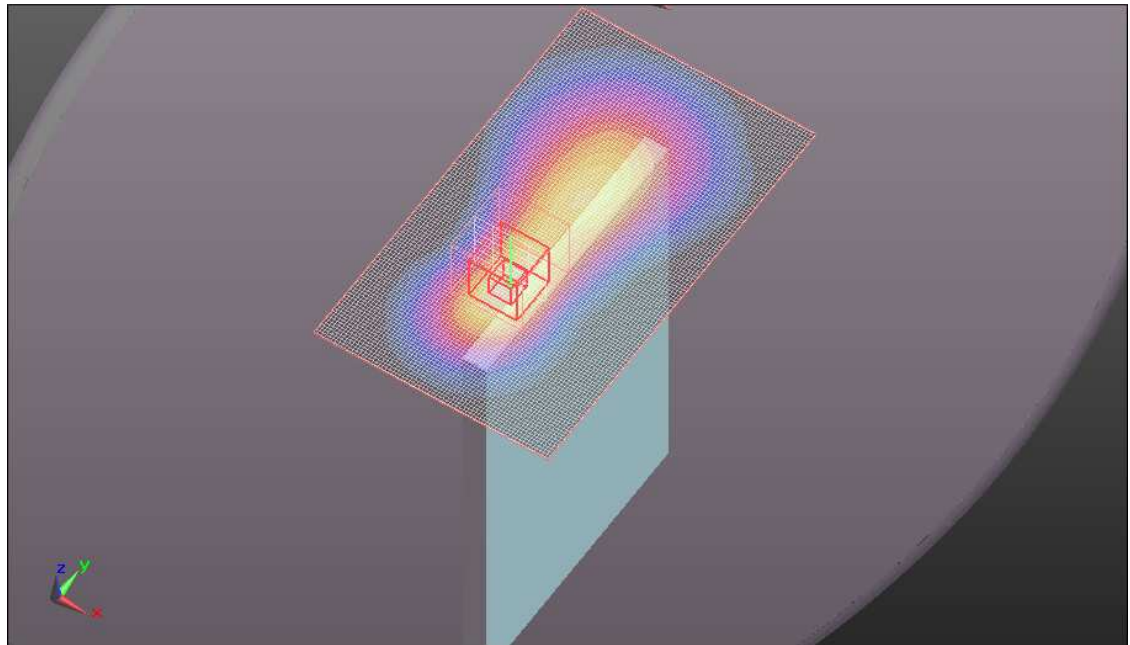
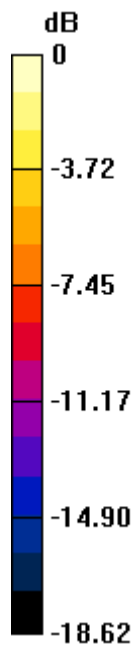
grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.291 V/m; Power Drift = -0.0075 dB

Peak SAR (extrapolated) = 1.238 W/kg

SAR(1 g) = 0.694 mW/g; SAR(10 g) = 0.346 mW/g

Maximum value of SAR (measured) = 0.937 mW/g



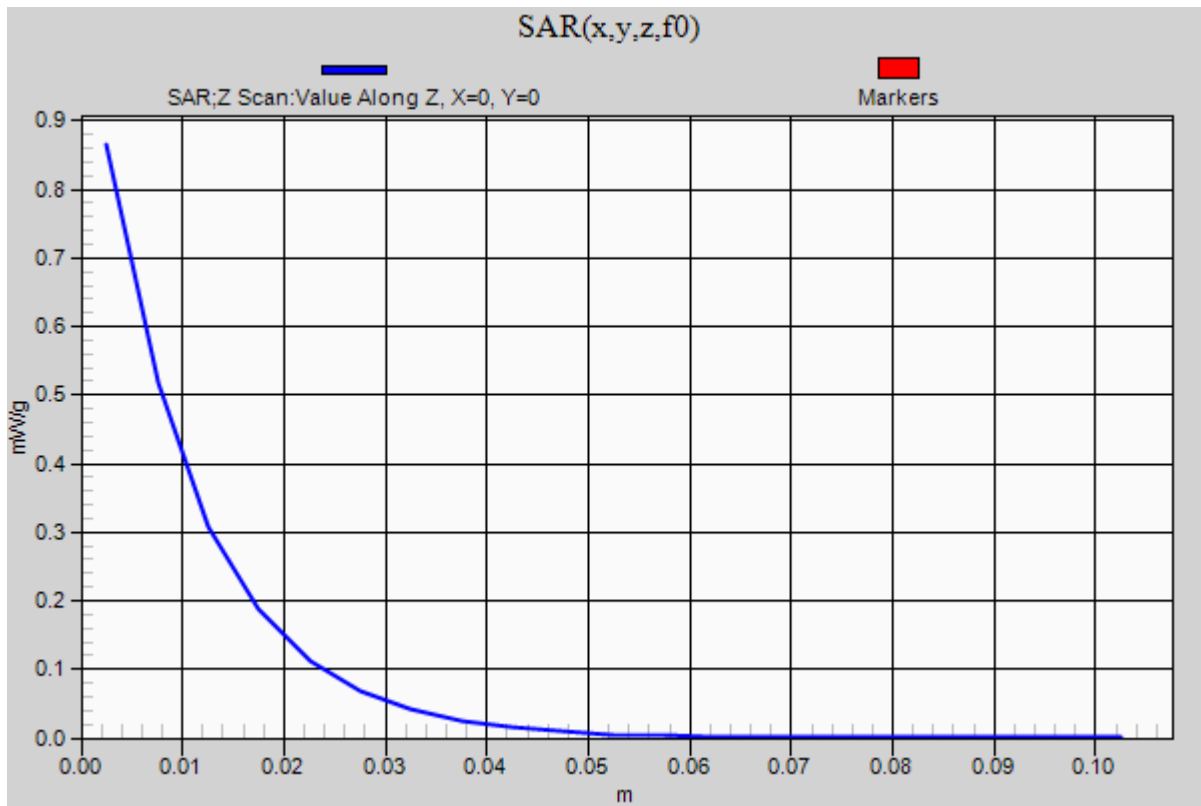
0 dB = 0.940mW/g

Test Laboratory: UL CCS SAR Lab C

01_GSM1900

Communication System: GPRS-FDD (GMSK, 2 slot); Frequency: 1880 MHz; Duty Cycle: 1:4.00037

Secondary Landscape_5 mm/GPRS 2 Slot_M-ch/Z Scan (1x1x21): Measurement grid: dx=20mm, dy=20mm, dz=5mm
Maximum value of SAR (measured) = 0.865 mW/g



Test Laboratory: UL CCS SAR Lab C

GSM1900

Communication System: GPRS-FDD (TDMA, GMSK, 2 slot); Frequency: 1880 MHz; Duty Cycle: 1:4.00037
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.537$ mho/m; $\epsilon_r = 54.742$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3772; ConvF(6.76, 6.76, 6.76); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1239; Calibrated: 10/18/2011
- Phantom: ELI v4.0 (A); Type: QDOVA001BB; Serial: 1117
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

Secondary Landscape 45deg._0 mm/GPRS 2 Slot_Mid-ch/Area Scan (81x121x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.791 mW/g

Secondary Landscape 45deg._0 mm/GPRS 2 Slot_Mid-ch/Zoom Scan (5x5x7)/Cube 0:

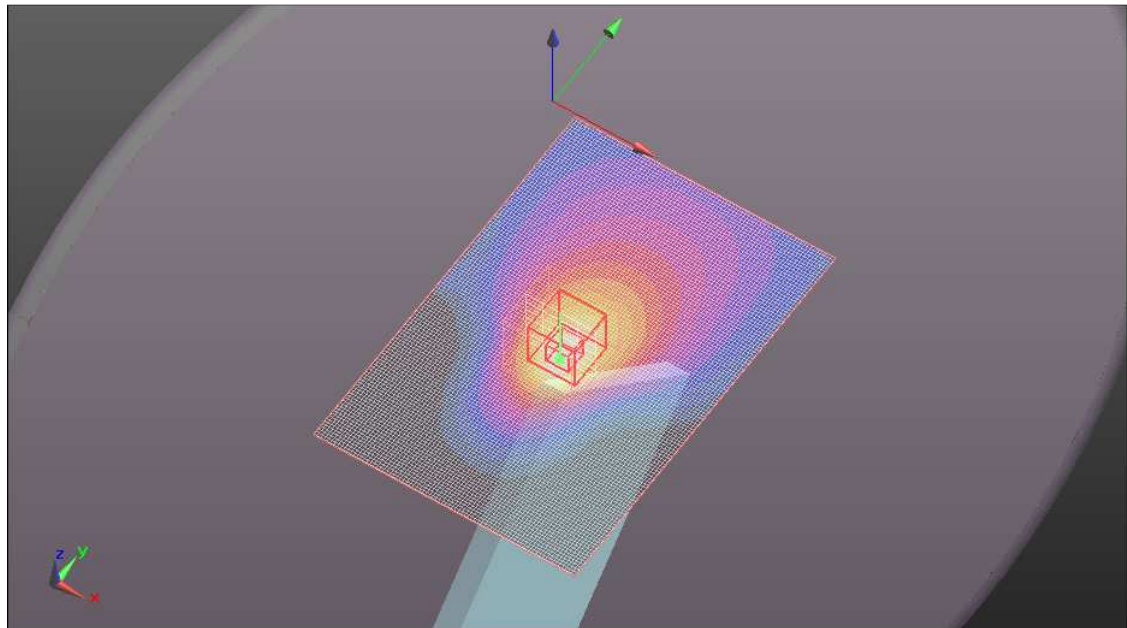
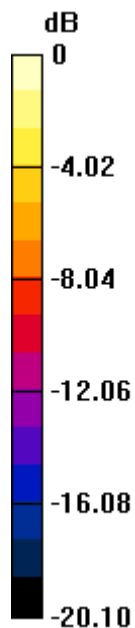
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.979 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.086 W/kg

SAR(1 g) = 0.591 mW/g; SAR(10 g) = 0.300 mW/g

Maximum value of SAR (measured) = 0.798 mW/g



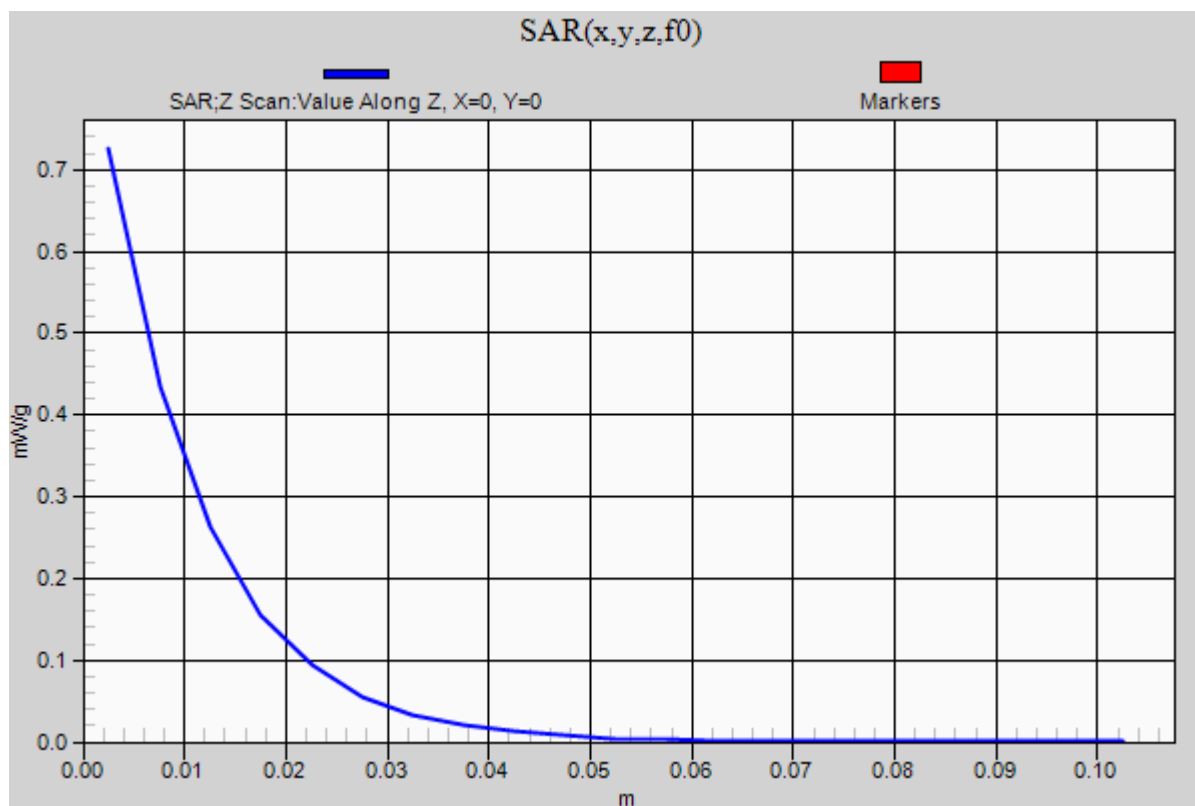
0 dB = 0.800mW/g

Test Laboratory: UL CCS SAR Lab C

GSM1900

Communication System: GPRS-FDD (TDMA, GMSK, 2 slot); Frequency: 1880 MHz; Duty Cycle: 1:4.00037

Secondary Landscape 45deg._0 mm/GPRS 2 Slot_Mid-ch/Z Scan (1x1x21): Measurement grid:
dx=20mm, dy=20mm, dz=5mm
Maximum value of SAR (measured) = 0.726 mW/g



Date: 10/11/2011

Test Laboratory: UL CCS SAR Lab C

02_GSM1900 (Full power)

Communication System: GPRS-FDD (GMSK, 2 slot); Frequency: 1880 MHz; Duty Cycle: 1:4.00037
Medium parameters used: $f = 1880$ MHz; $\sigma = 1.461$ mho/m; $\epsilon_r = 52.621$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3772; ConvF(6.76, 6.76, 6.76); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: ELI v4.0 (B); Type: QDOVA001BB; Serial: 1121
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Secondary Portrait_0 mm/GPRS 2 Slot_M-ch/Area Scan (71x161x1): Measurement grid:

dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.414 mW/g

Secondary Portrait_0 mm/GPRS 2 Slot_M-ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

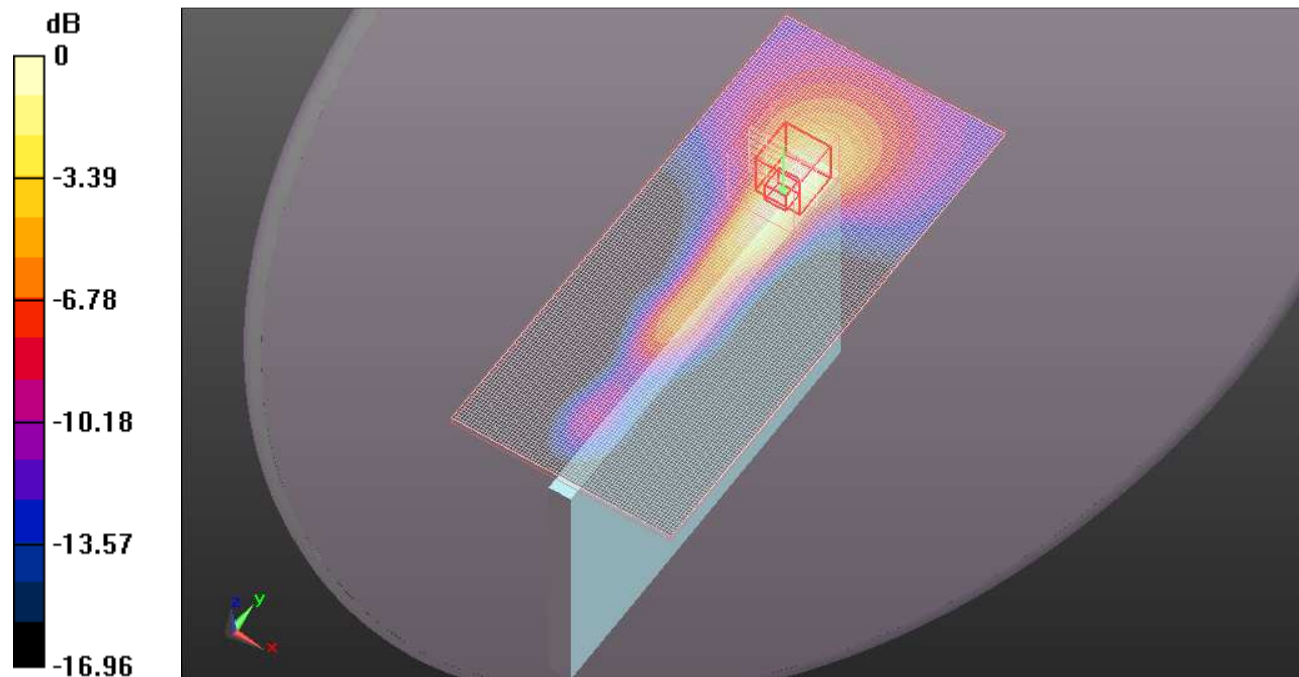
dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.488 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.599 W/kg

SAR(1 g) = 0.308 mW/g; SAR(10 g) = 0.160 mW/g

Maximum value of SAR (measured) = 0.444 mW/g



0 dB = 0.440mW/g

Test Laboratory: UL CCS SAR Lab A

01_GSM1900

Communication System: GPRS-FDD (GMSK, 2 slot); Frequency: 1880 MHz; Duty Cycle: 1:4.00037
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 52.733$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(6.99, 6.99, 6.99); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1239; Calibrated: 11/17/2010
- Phantom: ELI v4.0(B); Type: QDOVA001BB; Serial: 1099
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

Front View_10 mm/GPRS 2 Slot_M-ch/Area Scan (101x161x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.671 mW/g

Front View_10 mm/GPRS 2 Slot_M-ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 20.901 V/m; Power Drift = 0.0071 dB
 Peak SAR (extrapolated) = 0.874 W/kg
SAR(1 g) = 0.511 mW/g; SAR(10 g) = 0.272 mW/g
 Maximum value of SAR (measured) = 0.678 mW/g



Test Laboratory: UL CCS SAR Lab C

02_GSM1900 with power back off

Communication System: Generic GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.30042
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.489$ mho/m; $\epsilon_r = 52.354$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3772; ConvF(6.76, 6.76, 6.76); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: ELI v4.0 (A); Type: QDOVA001BB; Serial: 1117
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

Bottom Face_0 mm/GPRS 1 Slot_M-ch/Area Scan (101x161x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.087 mW/g

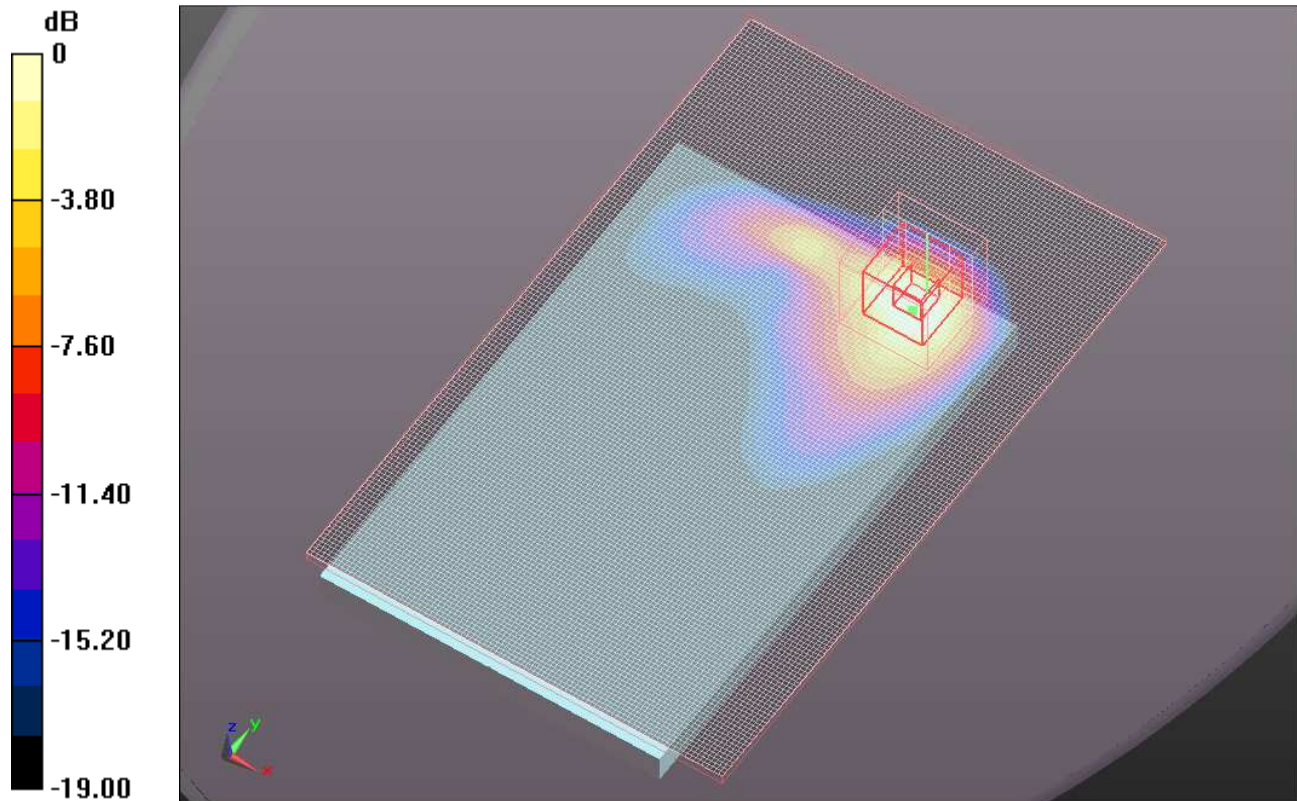
Bottom Face_0 mm/GPRS 1 Slot_M-ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.166 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.376 W/kg

SAR(1 g) = 0.654 mW/g; SAR(10 g) = 0.305 mW/g

Maximum value of SAR (measured) = 0.837 mW/g



0 dB = 0.840mW/g

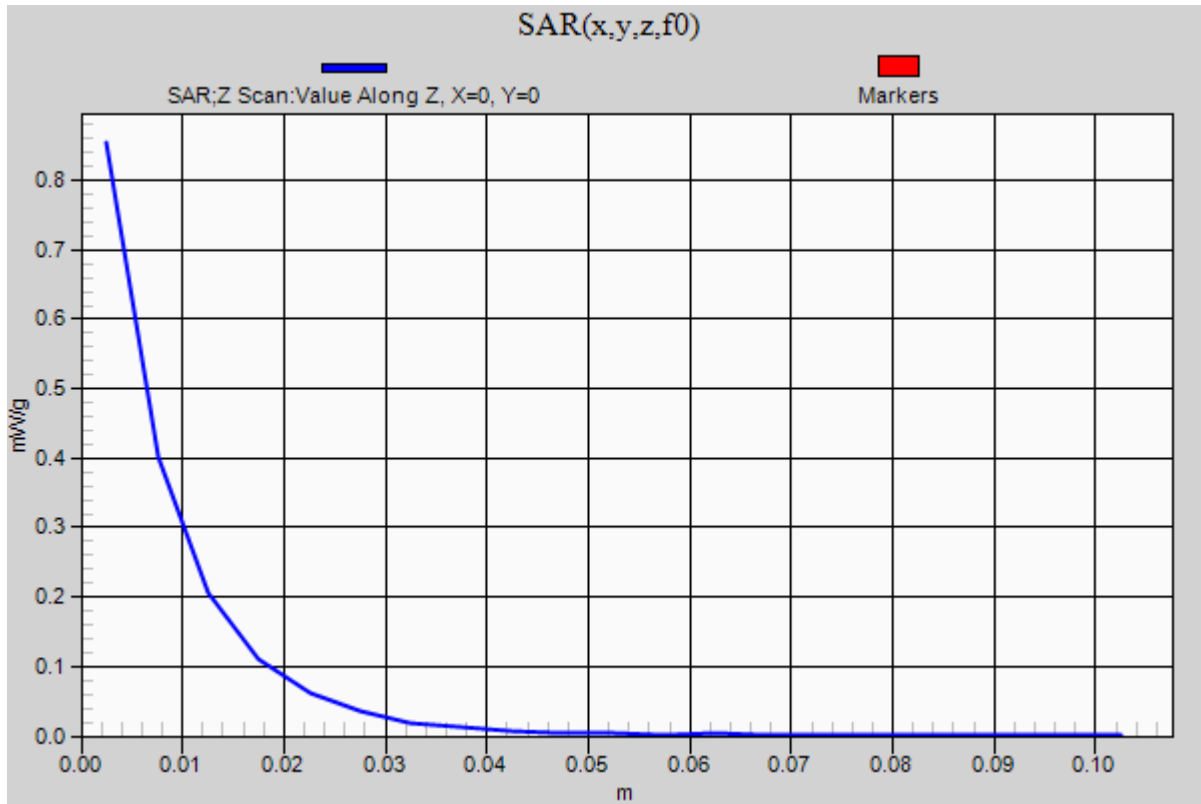
Test Laboratory: UL CCS SAR Lab C

02_GSM1900 with power back off

Communication System: Generic GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Bottom Face_0 mm/GPRS 1 Slot_M-ch/Z Scan (1x1x21): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.854 mW/g



Test Laboratory: UL CCS SAR Lab C

02_GSM1900 with power back off

Communication System: Generic GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.30042
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.531$ mho/m; $\epsilon_r = 51.917$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3772; ConvF(6.76, 6.76, 6.76); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: ELI v4.0 (A); Type: QDOVA001BB; Serial: 1117
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Secondary Landscape_0 mm/GPRS 1 Slot_M-ch/Area Scan (71x121x1): Measurement grid:

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.768 mW/g

Secondary Landscape_0 mm/GPRS 1 Slot_M-ch/Zoom Scan (5x5x7)/Cube 0: Measurement

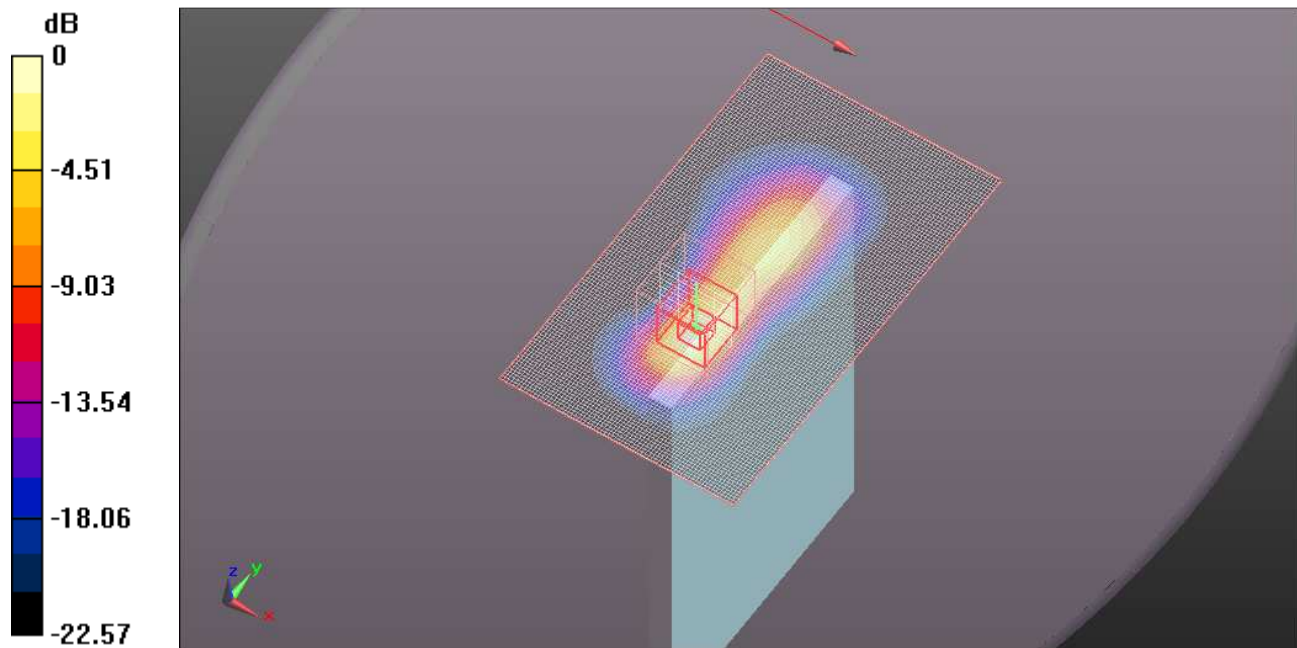
grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 14.734 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.152 W/kg

SAR(1 g) = 0.569 mW/g; SAR(10 g) = 0.246 mW/g

Maximum value of SAR (measured) = 0.829 mW/g



0 dB = 0.830mW/g

Test Laboratory: UL CCS SAR Lab C

02_GSM1900 with power back off

Communication System: Generic GSM; Frequency: 1880 MHz; Duty Cycle: 1:8.30042
Medium parameters used: $f = 1880$ MHz; $\sigma = 1.531$ mho/m; $\epsilon_r = 51.917$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3772; ConvF(6.76, 6.76, 6.76); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1257; Calibrated: 5/3/2011
- Phantom: ELI v4.0 (A); Type: QDOVA001BB; Serial: 1117
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Secondary Portrait_0 mm/GPRS 1 Slot_M-ch/Area Scan (71x161x1): Measurement grid:

$dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.082 mW/g

Secondary Portrait_0 mm/GPRS 1 Slot_M-ch/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

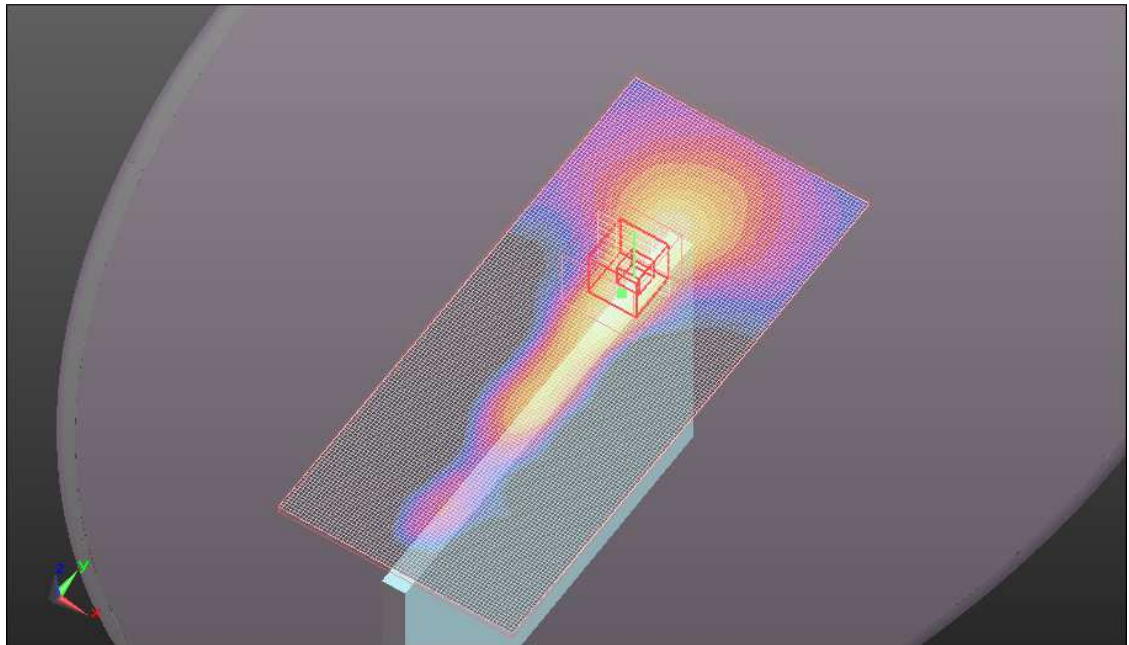
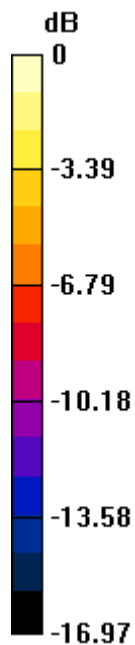
$dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 6.952 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.140 W/kg

SAR(1 g) = 0.073 mW/g; SAR(10 g) = 0.037 mW/g

Maximum value of SAR (measured) = 0.105 mW/g



0 dB = 0.100mW/g