

Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 7/15/2019

GSM850 Antenna parallel

Communication System: UID 0, Generic GPRS(TDMA, GMSK, TN 0-1) (0); Frequency: 824.2 MHz; Duty Cycle: 1:4.10015

Medium parameters used: $f = 825$ MHz; $\sigma = 0.93$ S/m; $\epsilon_r = 42.974$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

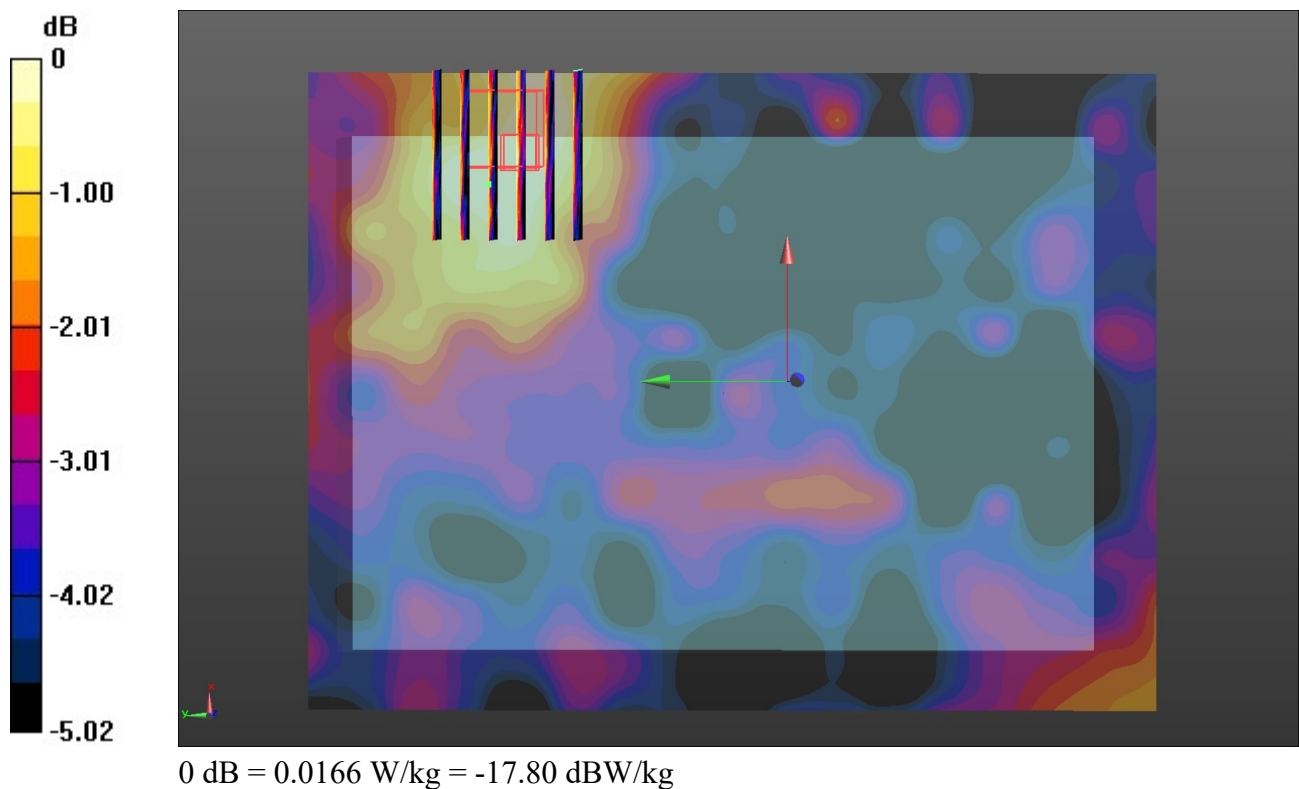
Ambient Temperature: 22.2°C; Liquid Temperature: 21.9°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(10.41, 10.41, 10.41) @ 824.2 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Back/CH 128/Area Scan (121x161x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm
Maximum value of SAR (interpolated) = 0.0176 W/kg

Back/CH 128/Zoom Scan (7x6x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm
Reference Value = 2.335 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.0180 W/kg
SAR(1 g) = 0.021 W/kg; SAR(10 g) = 0.00999 W/kg
Maximum value of SAR (measured) = 0.0166 W/kg



Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 7/17/2019

GSM1900 Antenna parallel

Communication System: UID 0, Generic GPRS(TDMA, GMSK, TN 0-1) (0); Frequency: 1850.2 MHz; Duty Cycle: 1:4.10015

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.437$ S/m; $\epsilon_r = 41.77$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.1°C; Liquid Temperature: 21.8°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.57, 8.57, 8.57) @ 1850.2 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Back/CH 512/Area Scan (121x161x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.0145 W/kg

Back/CH 512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

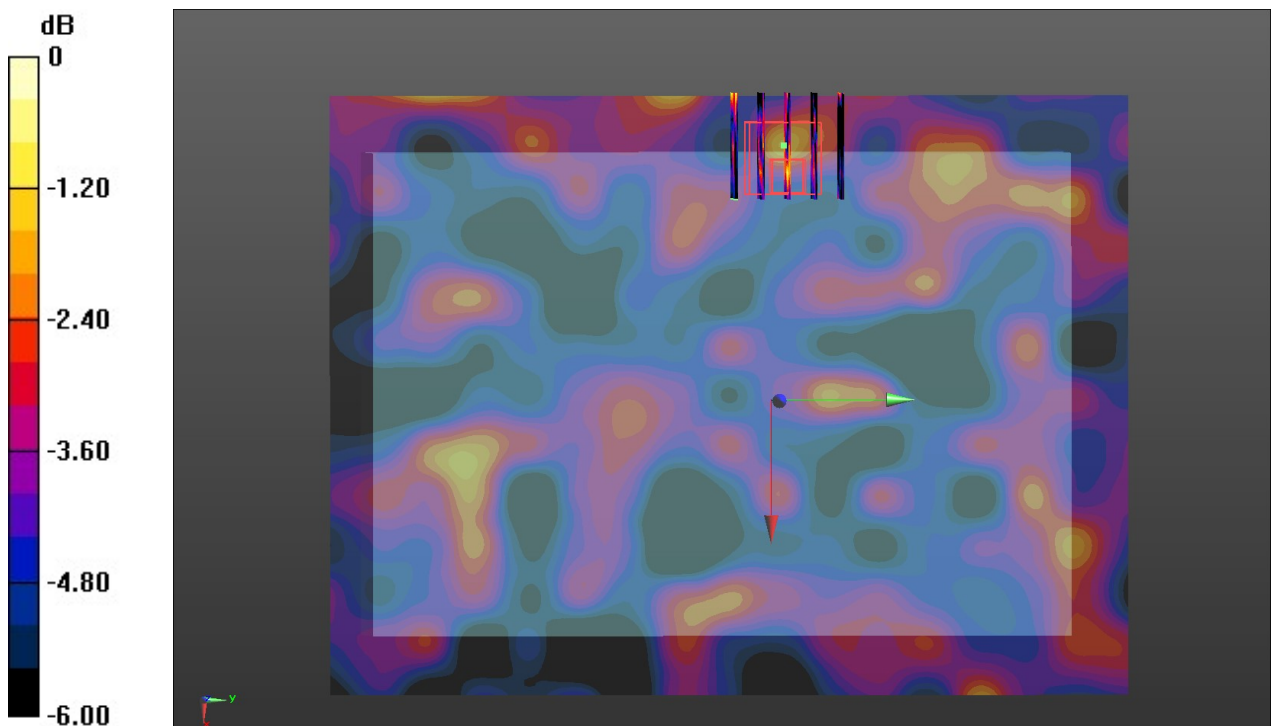
Reference Value = 1.913 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.0230 W/kg

SAR(1 g) = 0.012 W/kg; SAR(10 g) = 0.00702 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.0187 W/kg



0 dB = 0.0187 W/kg = -17.28 dBW/kg

WCDMA Band II Antenna parallel

Communication System: UID 0, Generic UMTS (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.455$ S/m; $\epsilon_r = 41.738$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C; Liquid Temperature: 22.1°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.57, 8.57, 8.57) @ 1880 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Back/CH 9400/Area Scan (131x161x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.111 W/kg

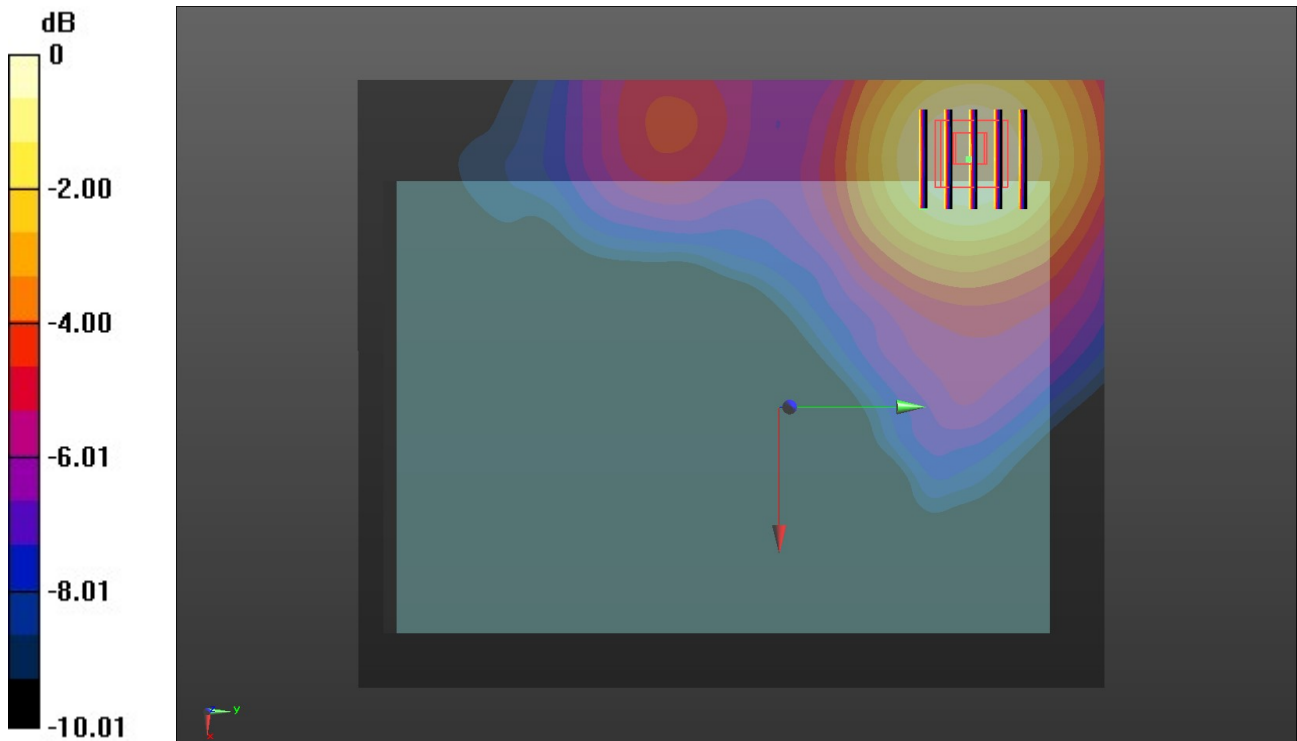
Back/CH 9400/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 0.9780 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.125 W/kg

SAR(1 g) = 0.079 W/kg; SAR(10 g) = 0.051 W/kg

Maximum value of SAR (measured) = 0.108 W/kg



0 dB = 0.108 W/kg = -9.67 dBW/kg

WCDMA Band V Antenna parallel

Communication System: UID 0, Generic UMTS (0); Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.93$ S/m; $\epsilon_r = 42.963$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.3°C; Liquid Temperature: 22.0°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(10.41, 10.41, 10.41) @ 826.4 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Back/CH 4132/Area Scan (131x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.0519 W/kg

Back/CH 4132/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

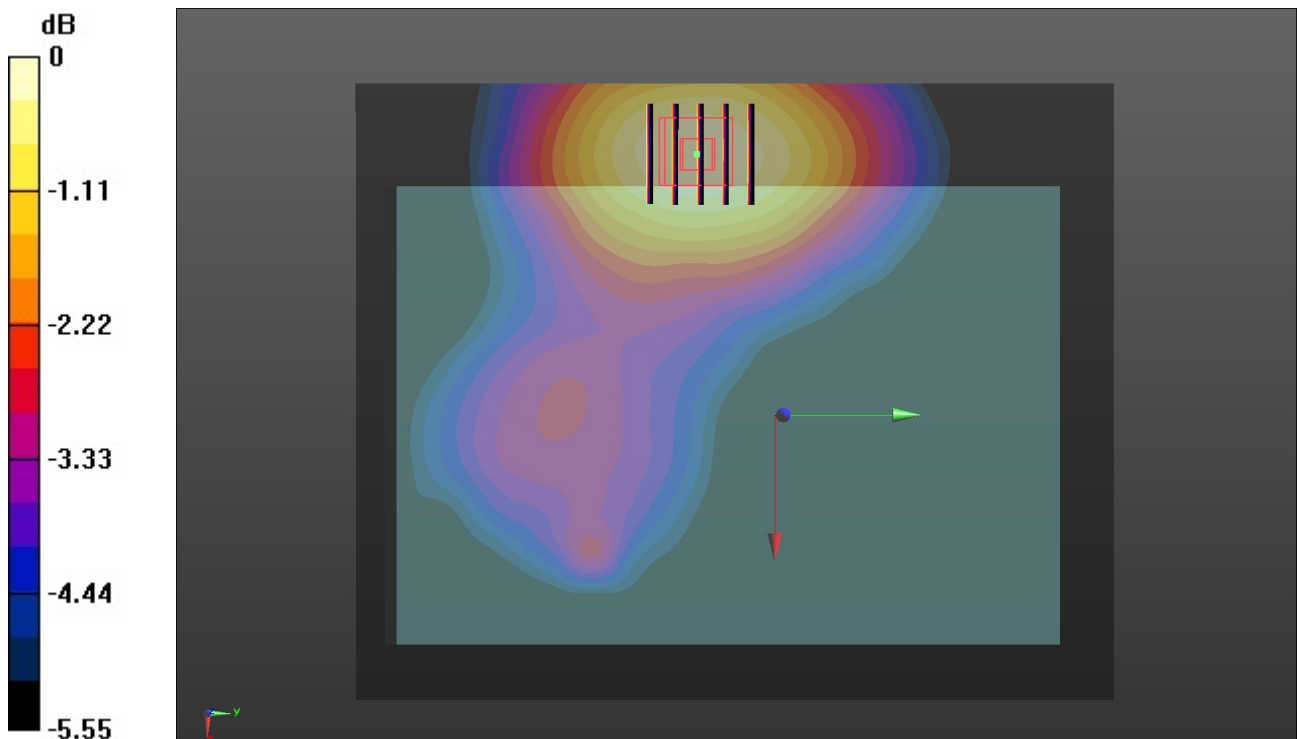
Reference Value = 3.870 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.0590 W/kg

SAR(1 g) = 0.040 W/kg; SAR(10 g) = 0.029 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.0517 W/kg



0 dB = 0.0517 W/kg = -12.87 dBW/kg

LTE Band 4 Antenna parallel

Communication System: UID 0, Generic LTE-FDD (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.371$ S/m; $\epsilon_r = 41.952$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.2°C; Liquid Temperature: 21.9°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(8.91, 8.91, 8.91) @ 1745 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Back/CH 20300/Area Scan (121x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.106 W/kg

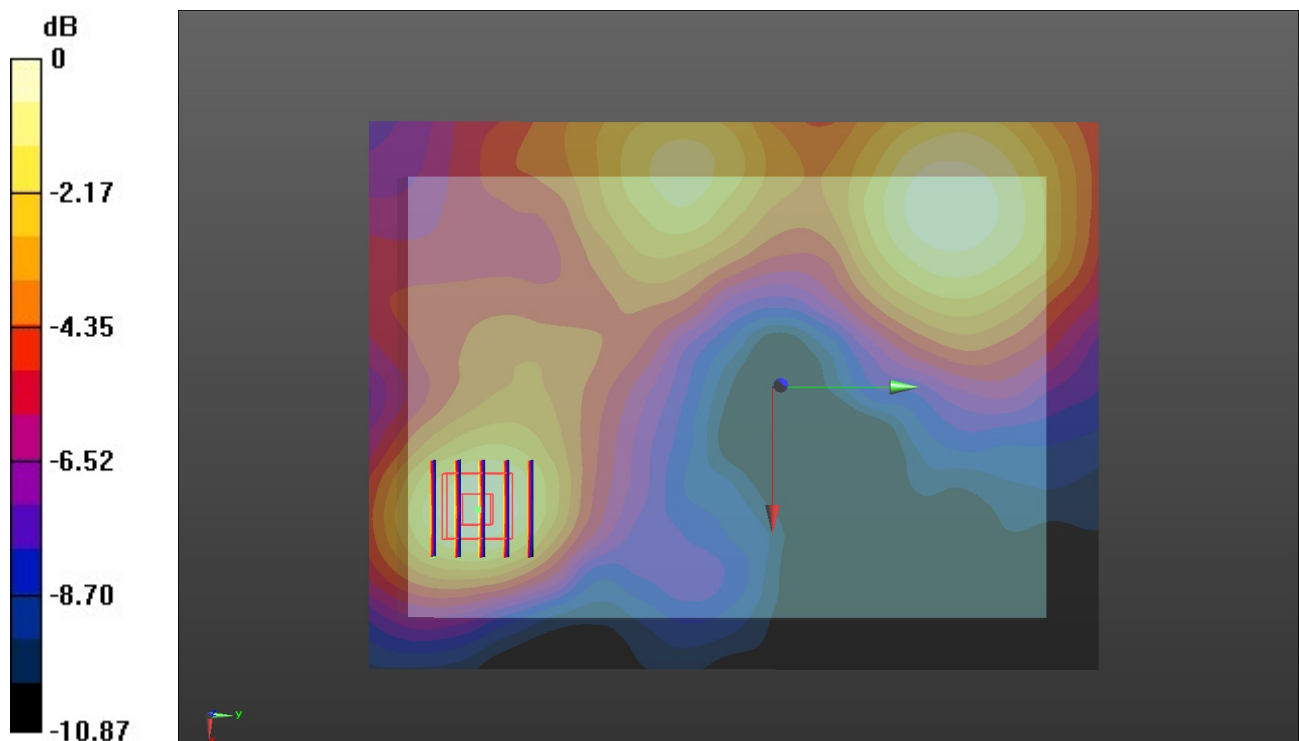
Back/CH 20300/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.659 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.122 W/kg

SAR(1 g) = 0.074 W/kg; SAR(10 g) = 0.048 W/kg

Maximum value of SAR (measured) = 0.103 W/kg



0 dB = 0.103 W/kg = -9.87 dBW/kg

Test Laboratory: Huatongwei International Inspection Co., Ltd., SAR Lab

Date: 7/18/2019

WiFi 2.4G Antenna parallel

Communication System: UID 0, Generic WIFI (0); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.818$ S/m; $\epsilon_r = 41.03$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Ambient Temperature: 22.1°C; Liquid Temperature: 21.9°C;

DASY Configuration:

- Probe: EX3DV4 - SN7494; ConvF(7.9, 7.9, 7.9) @ 2412 MHz; Calibrated: 3/25/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1549; Calibrated: 3/19/2019
- Phantom: ELI V8.0 ; Type: QD OVA 004 AA ; Serial: 2078
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Back/CH 1/Area Scan (151x201x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.00611 W/kg

Back/CH 1/Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

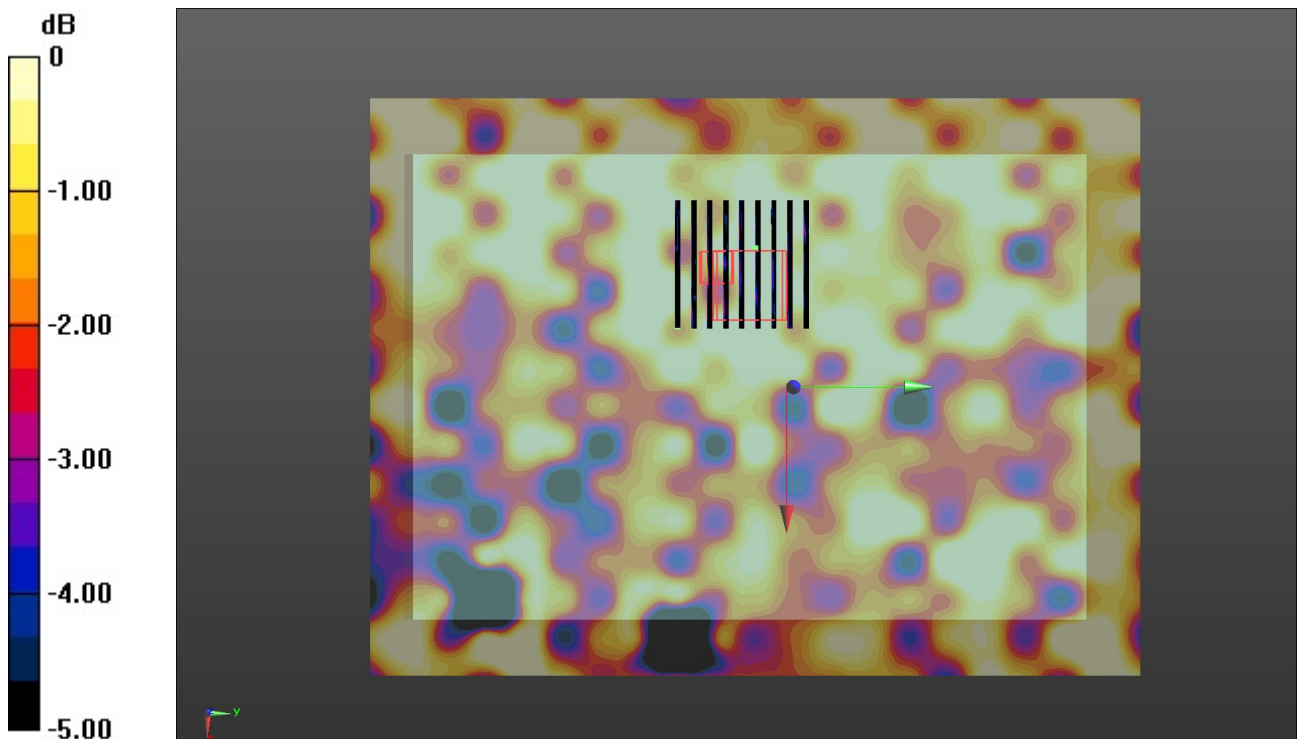
Reference Value = 0.8120 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.00720 W/kg

SAR(1 g) = 0.002 W/kg; SAR(10 g) = 0.000651 W/kg

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.00404 W/kg



0 dB = 0.00404 W/kg = -23.94 dBW/kg