01 HAC T-Coil_GSM850_GSM_Ch189(Z)

DUT: 331403-03B

Communication System: General GSM; Frequency: 836.4 MHz;Duty Cycle: 1:8
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)
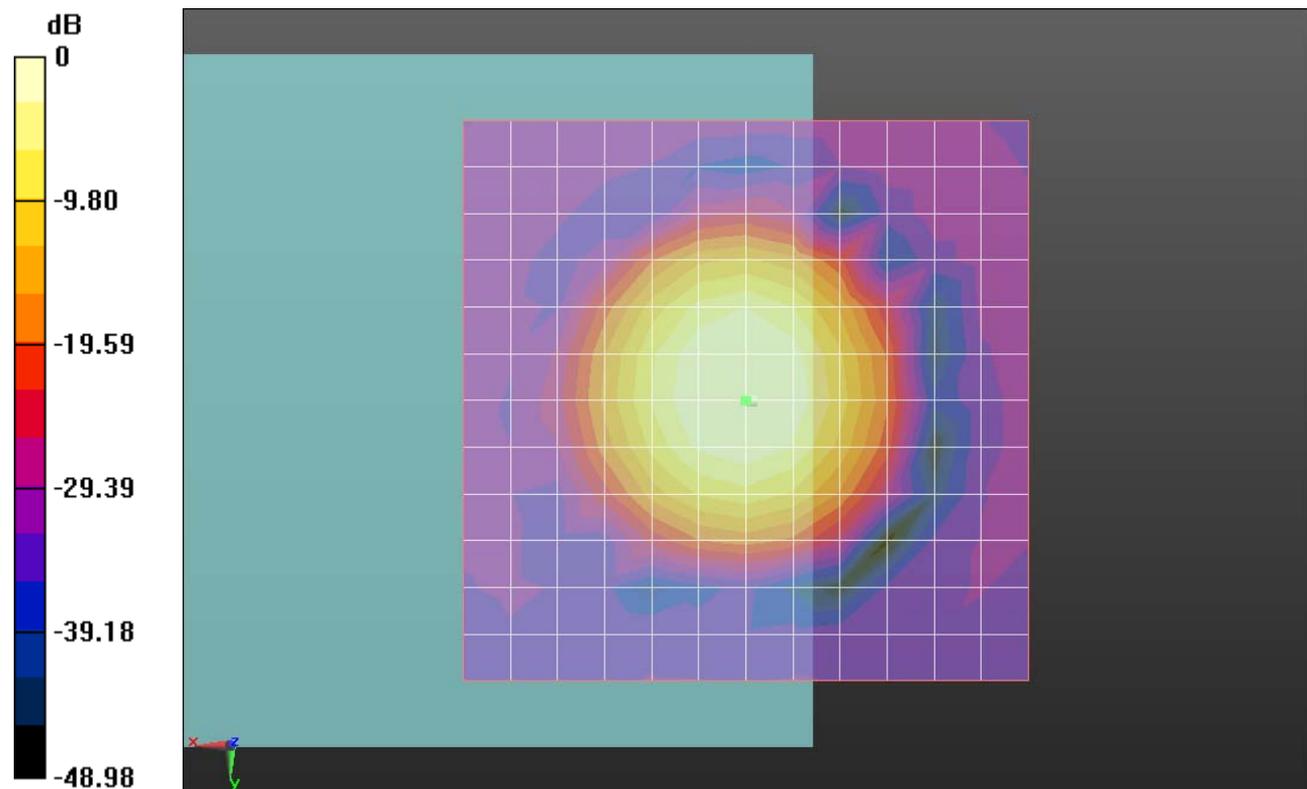
Ch189/z (axial) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):
Measurement grid: dx=10mm, dy=10mm
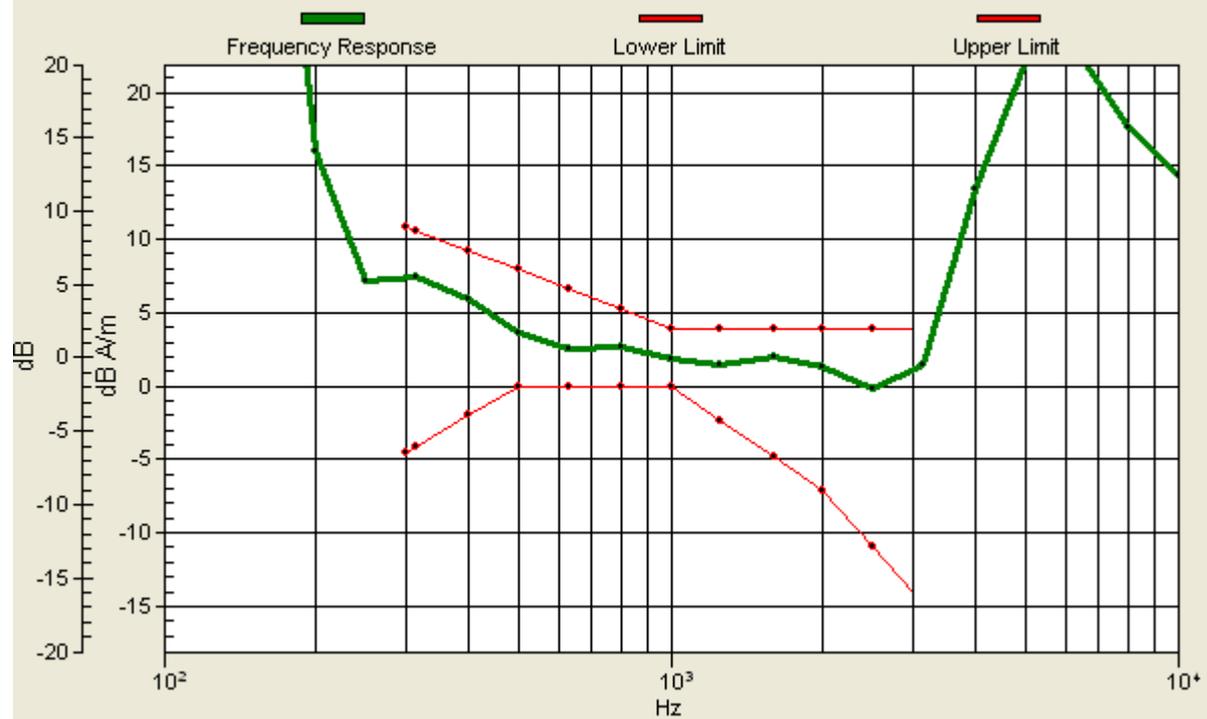ABM1/ABM2 = 37.71 dB
ABM1 comp = 2.42 dB A/m
Location: 0, 0, 3.7 mm

0 dB = 1.000A/m

Ch189/z (axial) wideband at best S/N/ABM [HAC-2007] Freq Resp(x,y,z,f)

Loc: 0, 0, 3.7 mm Diff: 1.91dB

Frequency Response   Lower Limit   Upper Limit

01 HAC T-Coil_GSM850_GSM_Ch189(X)

DUT: 331403-03B

Communication System: General GSM; Frequency: 836.4 MHz;Duty Cycle: 1:8
Medium: Air Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 0 kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
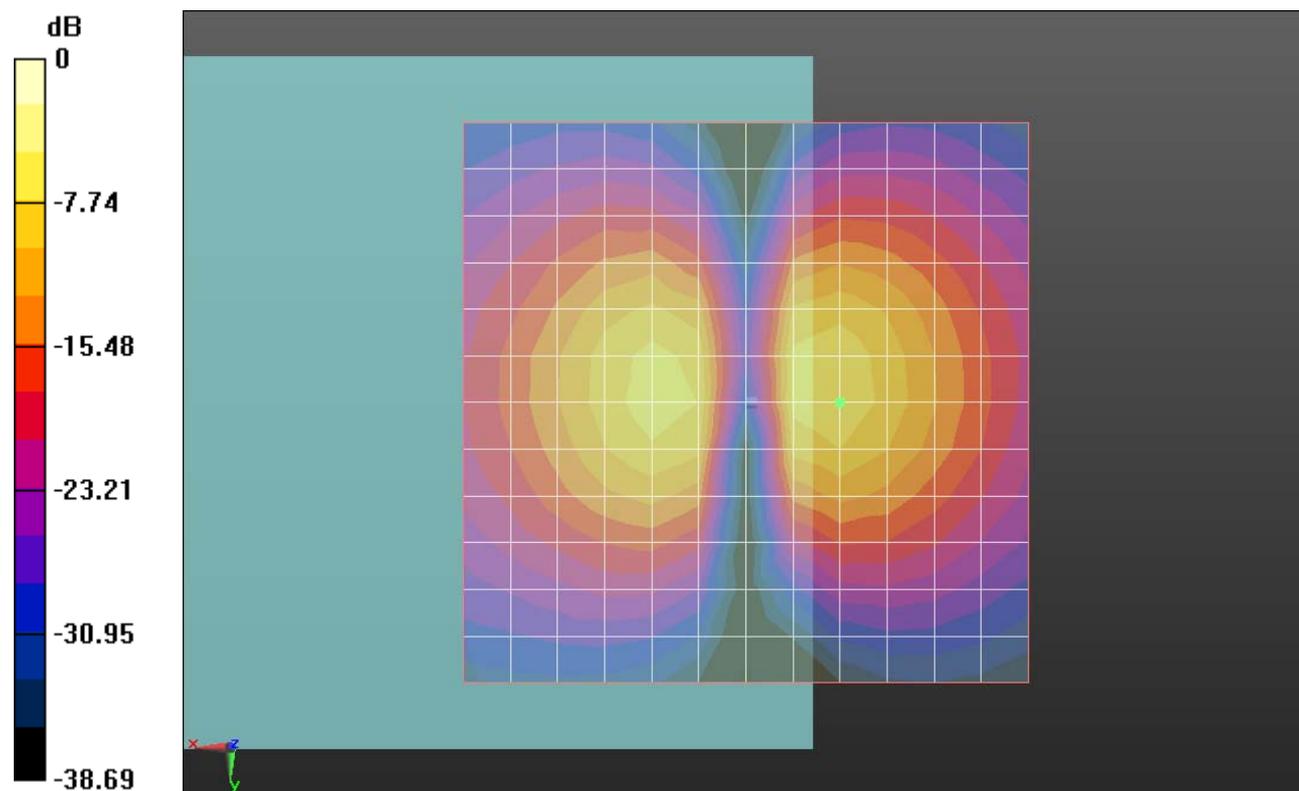- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)

Ch189/x (longitudinal) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):
Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 35.35 dB
ABM1 comp = -5.47 dB A/m
Location: -8.3, 0, 3.7 mm

0 dB = 1.000A/m

01 HAC T-Coil_GSM850_GSM_Ch189(Y)

DUT: 331403-03B

Communication System: General GSM; Frequency: 836.4 MHz;Duty Cycle: 1:8

Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3

Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
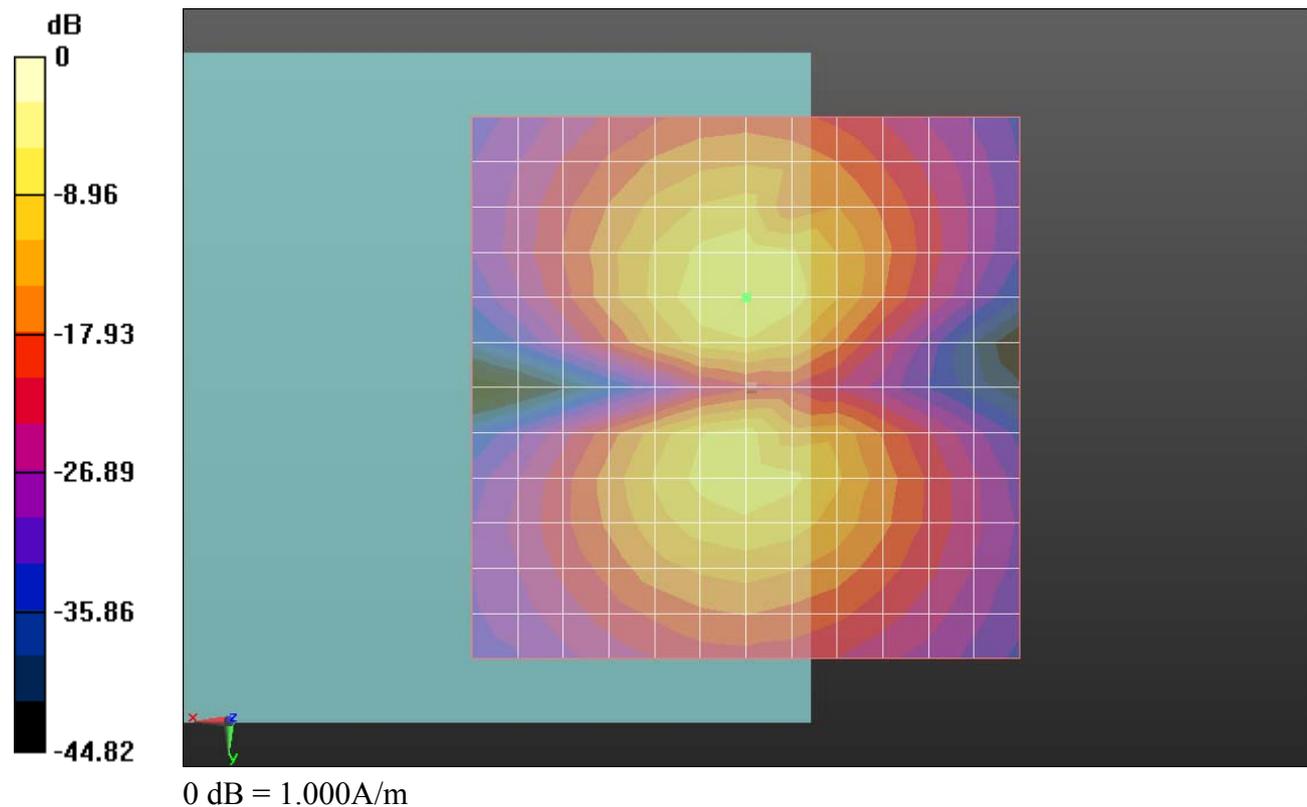- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)

Ch189/y (transversal) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm

ABM1/ABM2 = 35.68 dB

ABM1 comp = -5.89 dB A/m

Location: 0, -8.3, 3.7 mm

0 dB = 1.000A/m

02 HAC T-Coil_GSM1900_GSM_Ch661(Z)

DUT: 331403-03B

Communication System: General GSM; Frequency: 1880 MHz;Duty Cycle: 1:8
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
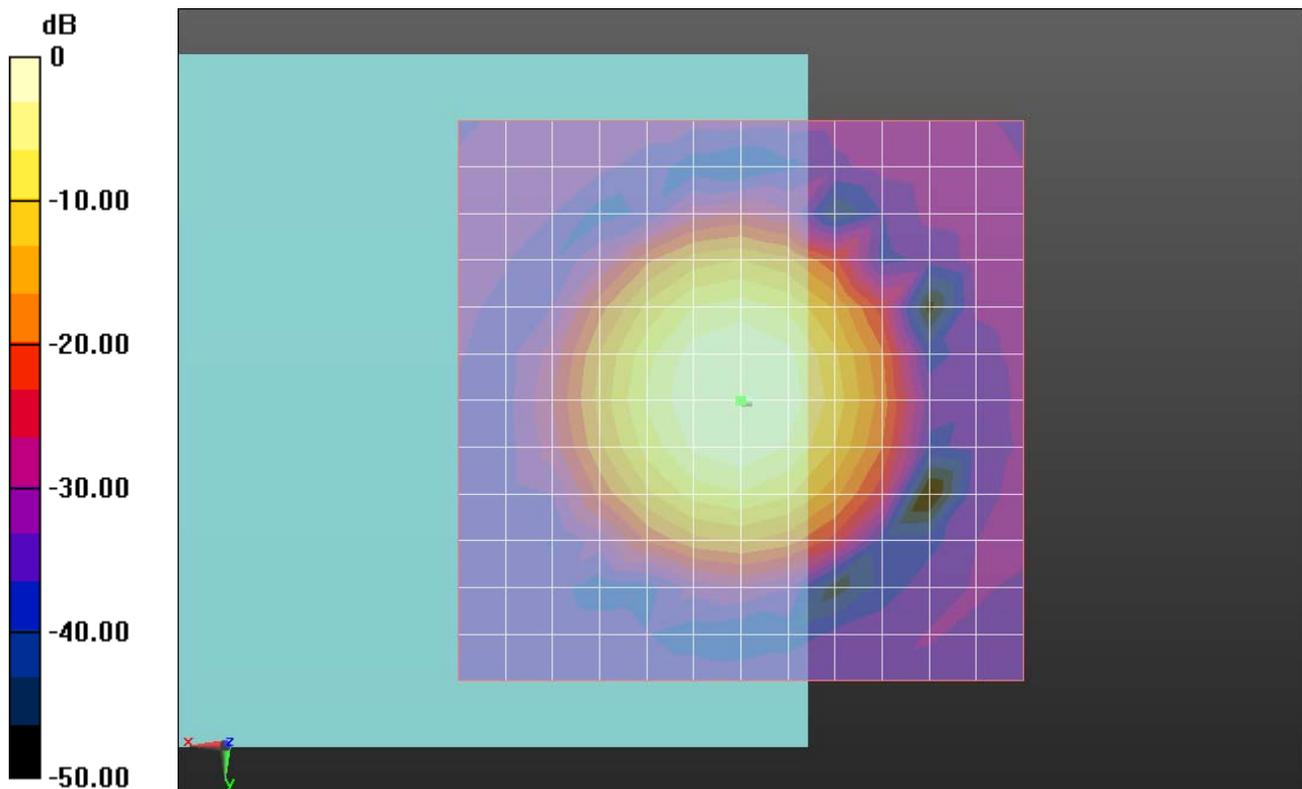- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)

Ch661/z (axial) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):
Measurement grid: dx=10mm, dy=10mm
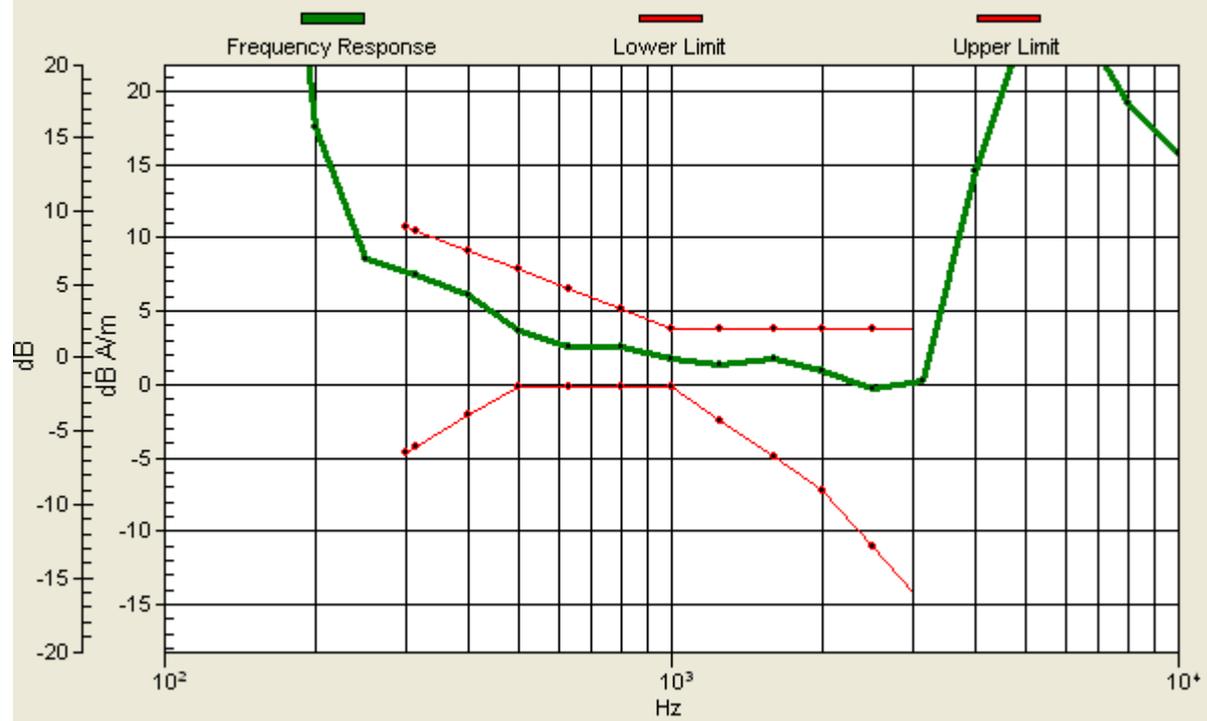ABM1/ABM2 = 39.48 dB
ABM1 comp = 1.50 dB A/m
Location: 0, 0, 3.7 mm

0 dB = 1.000A/m

Ch661/z (axial) wideband at best S/N/ABM [HAC-2007] Freq Resp(x,y,z,f)
Loc: 0, 0, 3.7 mm Diff: 2dB

Frequency Response   Lower Limit   Upper Limit

02 HAC T-Coil_GSM1900_GSM_Ch661(X)

DUT: 331403-03B

Communication System: General GSM; Frequency: 1880 MHz;Duty Cycle: 1:8

Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3

Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
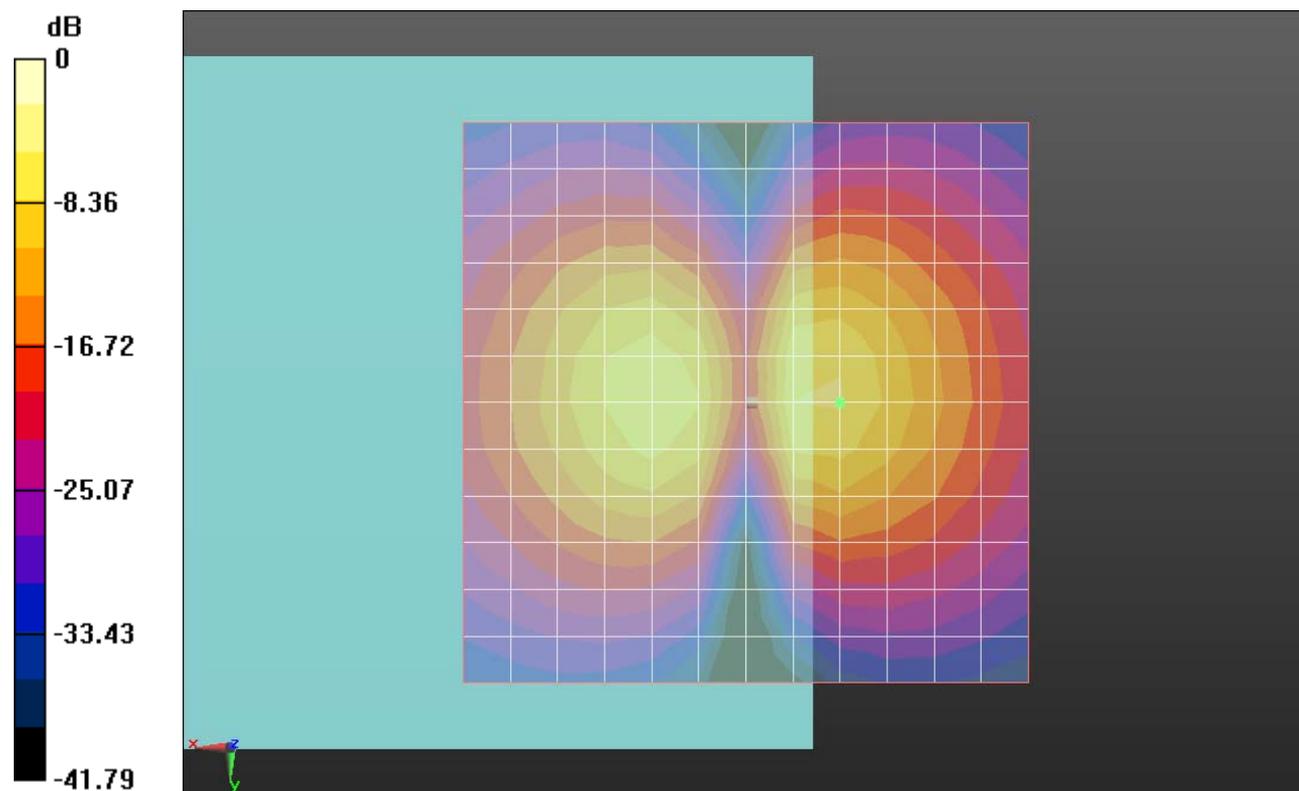- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)

Ch661/x (longitudinal) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):
Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 40.42 dB
ABM1 comp = -5.22 dB A/m
Location: -8.3, 0, 3.7 mm

0 dB = 1.000A/m

02 HAC T-Coil_GSM1900_GSM_Ch661(Y)

DUT: 331403-03B

Communication System: General GSM; Frequency: 1880 MHz;Duty Cycle: 1:8

Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3

Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
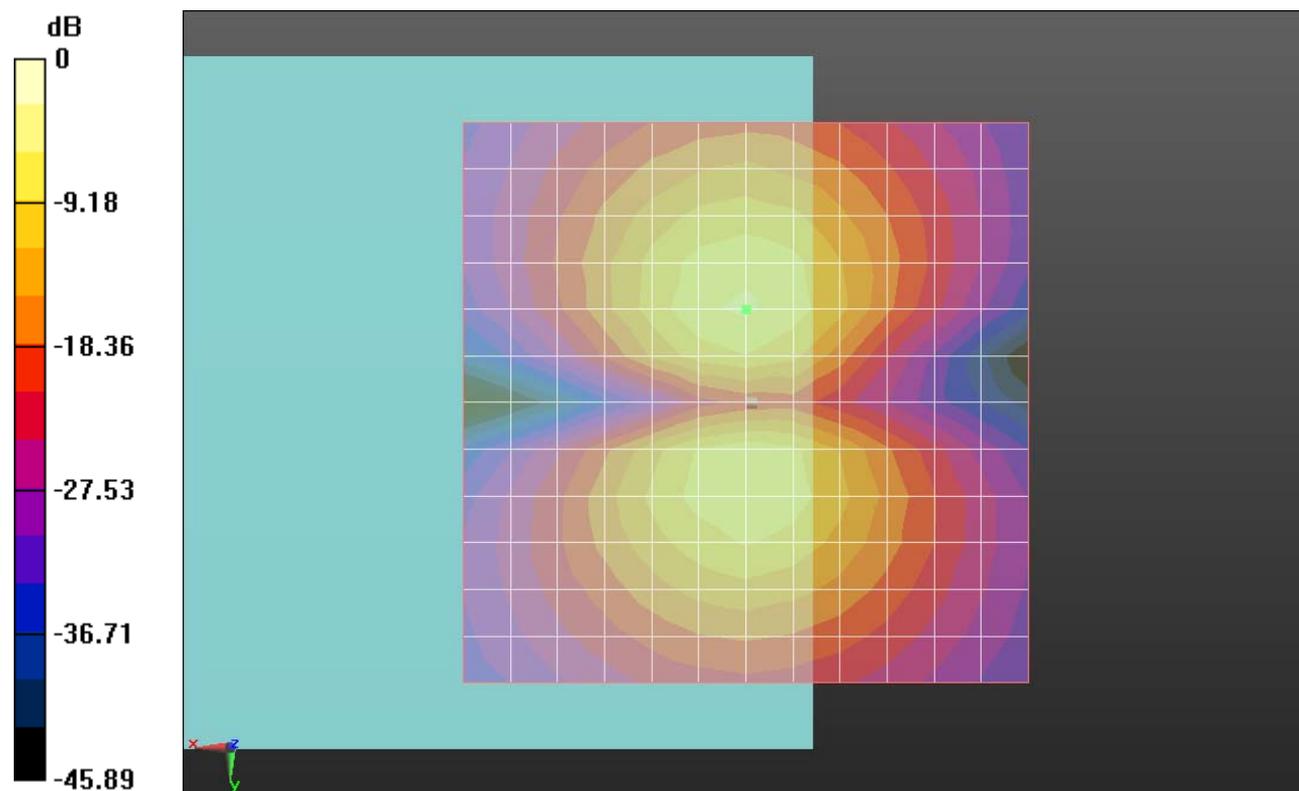- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)

Ch661/y (transversal) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):
Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 38.18 dB
ABM1 comp = -5.46 dB A/m
Location: 0, -8.3, 3.7 mm

0 dB = 1.000A/m

03 HAC T-Coil_WCDMA Band V_RMC 12.2Kbps_Ch4182(Z)

DUT: 331403-03B

Communication System: UMTS; Frequency: 836.4 MHz;Duty Cycle: 1:1

Medium: Air Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 0 kg/m^3

Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)
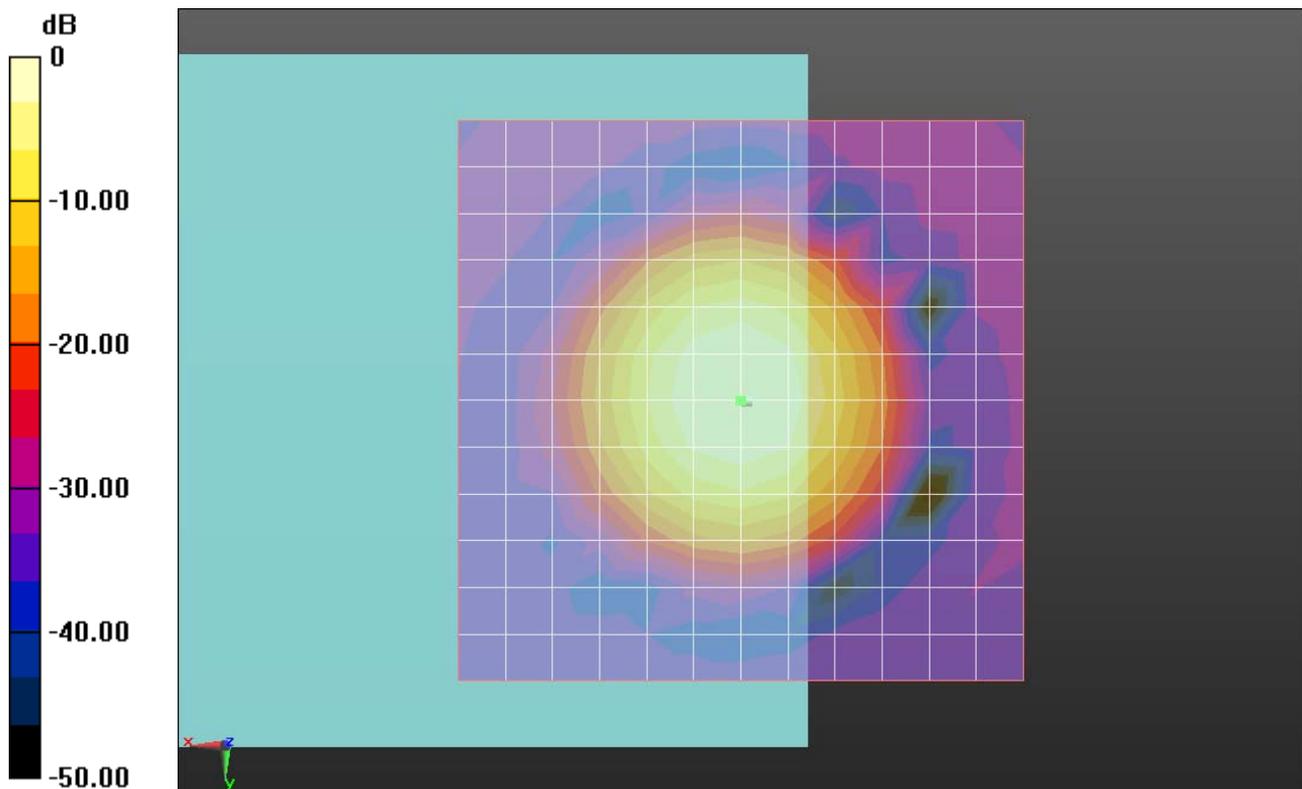
Ch4182/z (axial) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
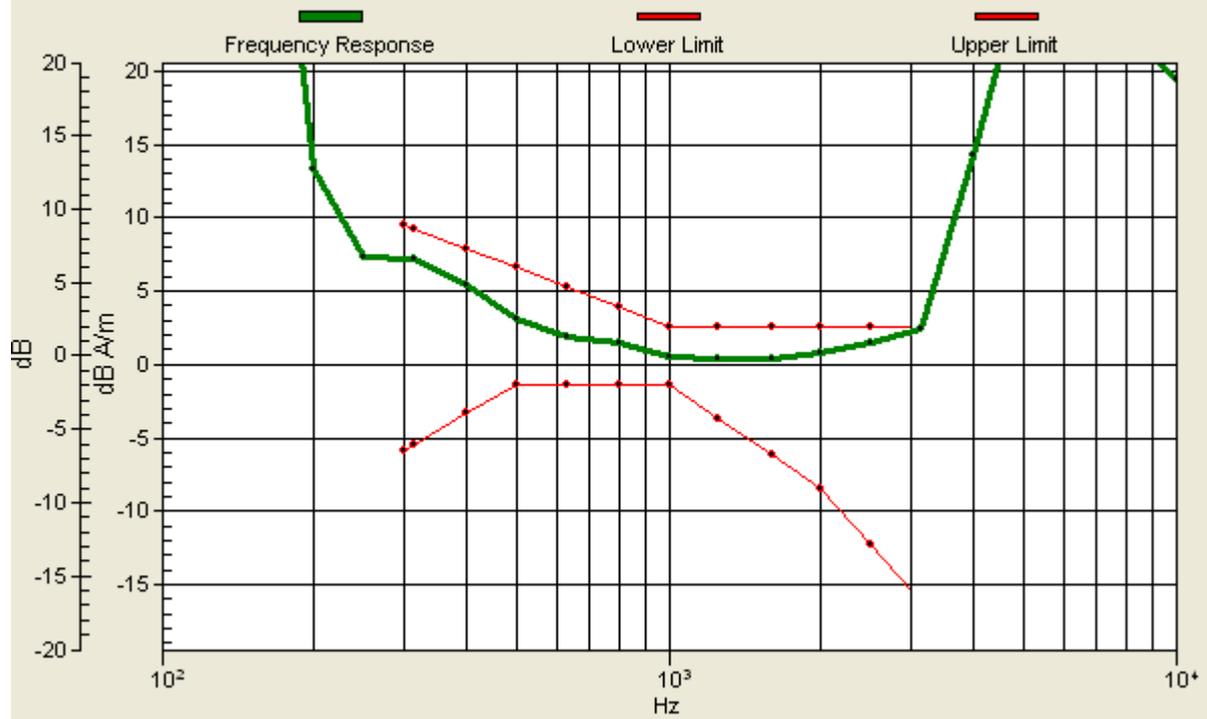
ABM1/ABM2 = 42.52 dB

ABM1 comp = 1.74 dB A/m

Location: 0, 0, 3.7 mm

0 dB = 1.000A/m

Ch4182/z (axial) wideband at best S/N/ABM [HAC-2007] Freq Resp(x,y,z,f)
Loc: 0, 0, 3.7 mm Diff: 0.41dB

Frequency Response   Lower Limit   Upper Limit

03 HAC T-Coil_WCDMA Band V_RMC 12.2Kbps_Ch4182(X)

DUT: 331403-03B

Communication System: UMTS; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 0 kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
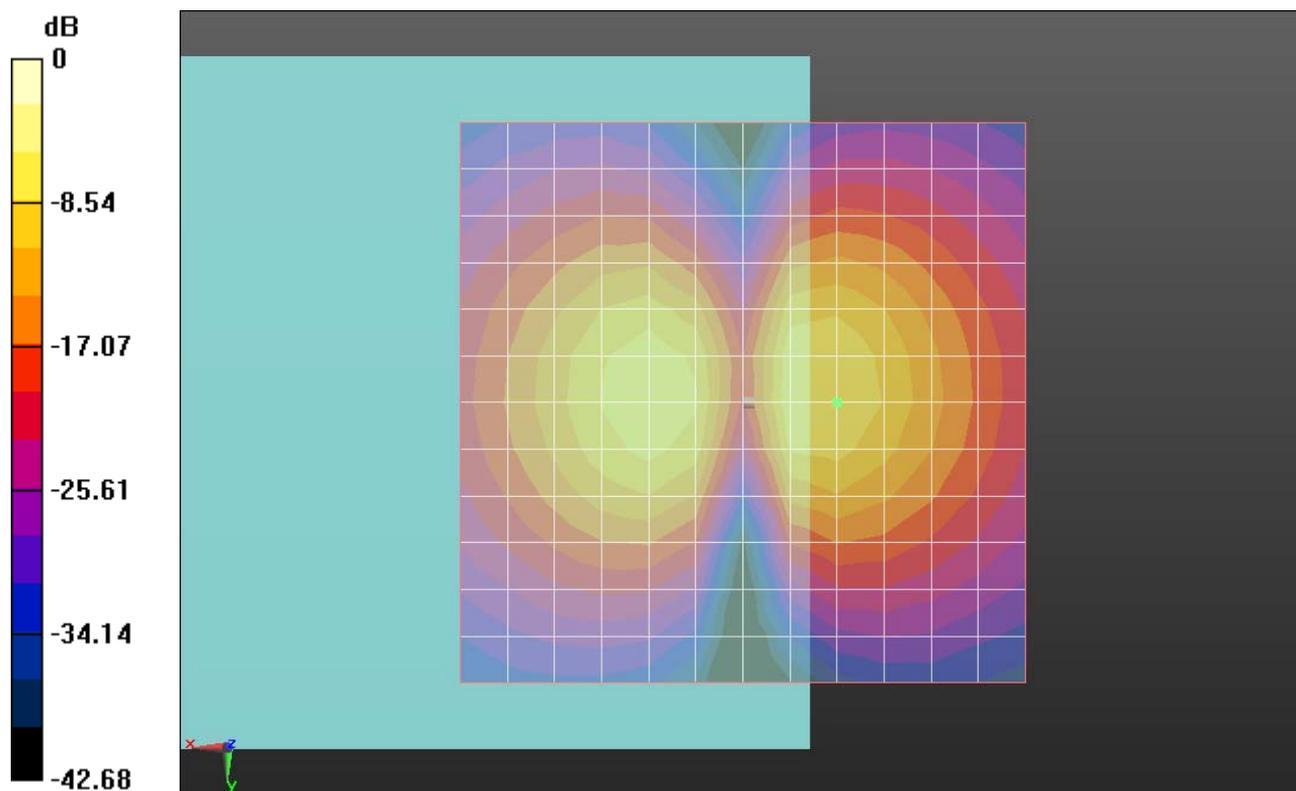- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)

Ch4182/x (longitudinal) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):
Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 43.95 dB
ABM1 comp = -5.63 dB A/m
Location: -8.3, 0, 3.7 mm

0 dB = 1.000A/m

03 HAC T-Coil_WCDMA Band V_RMC 12.2Kbps_Ch4182(Y)

DUT: 331403-03B

Communication System: UMTS; Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: σ = 0 mho/m, $ε_r$ = 1; ρ = 0 kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
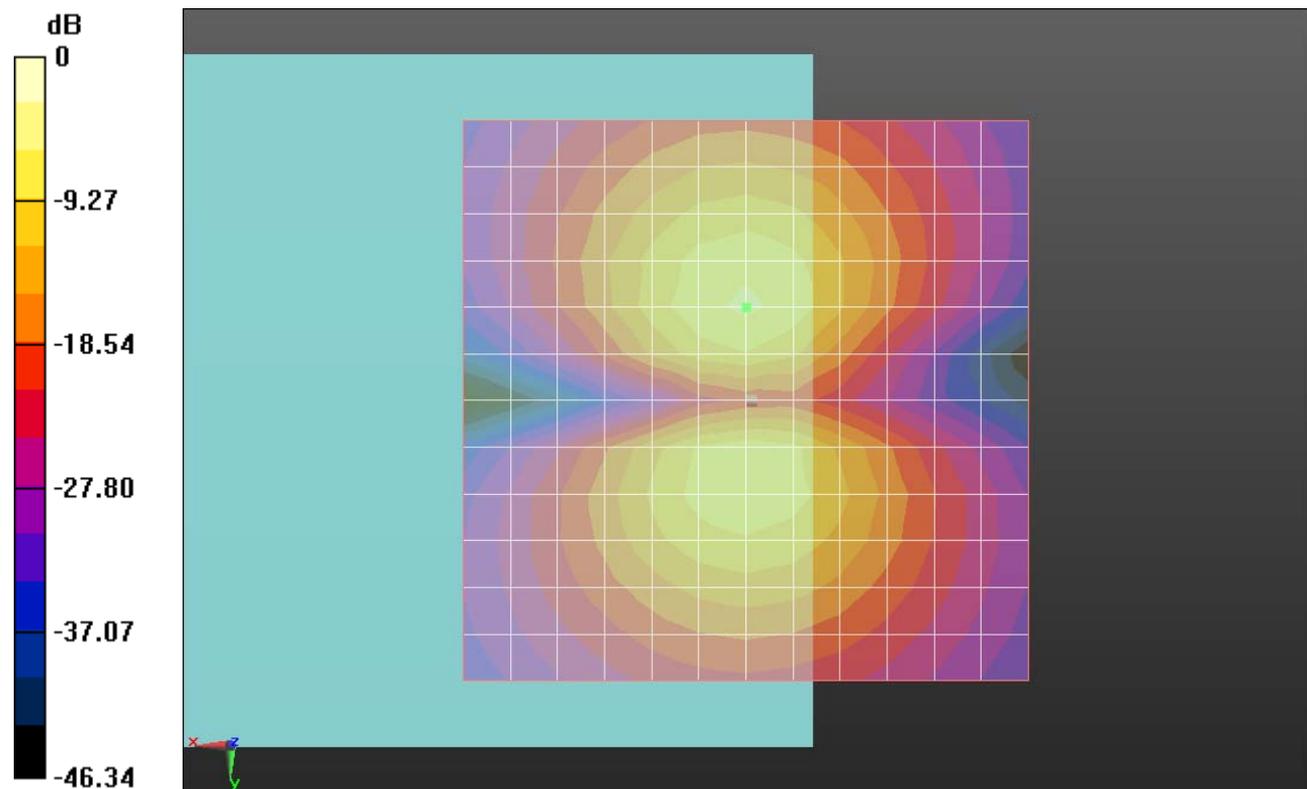- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)

Ch4182/y (transversal) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):
Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 36.85 dB
ABM1 comp = -5.45 dB A/m
Location: 0, -8.3, 3.7 mm

0 dB = 1.000A/m

04 HAC T-Coil_WCDMA Band IV_RMC 12.2Kbps_Ch1413(Z)

DUT: 331403-03B

Communication System: UMTS; Frequency: 1732.6 MHz;Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3

Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
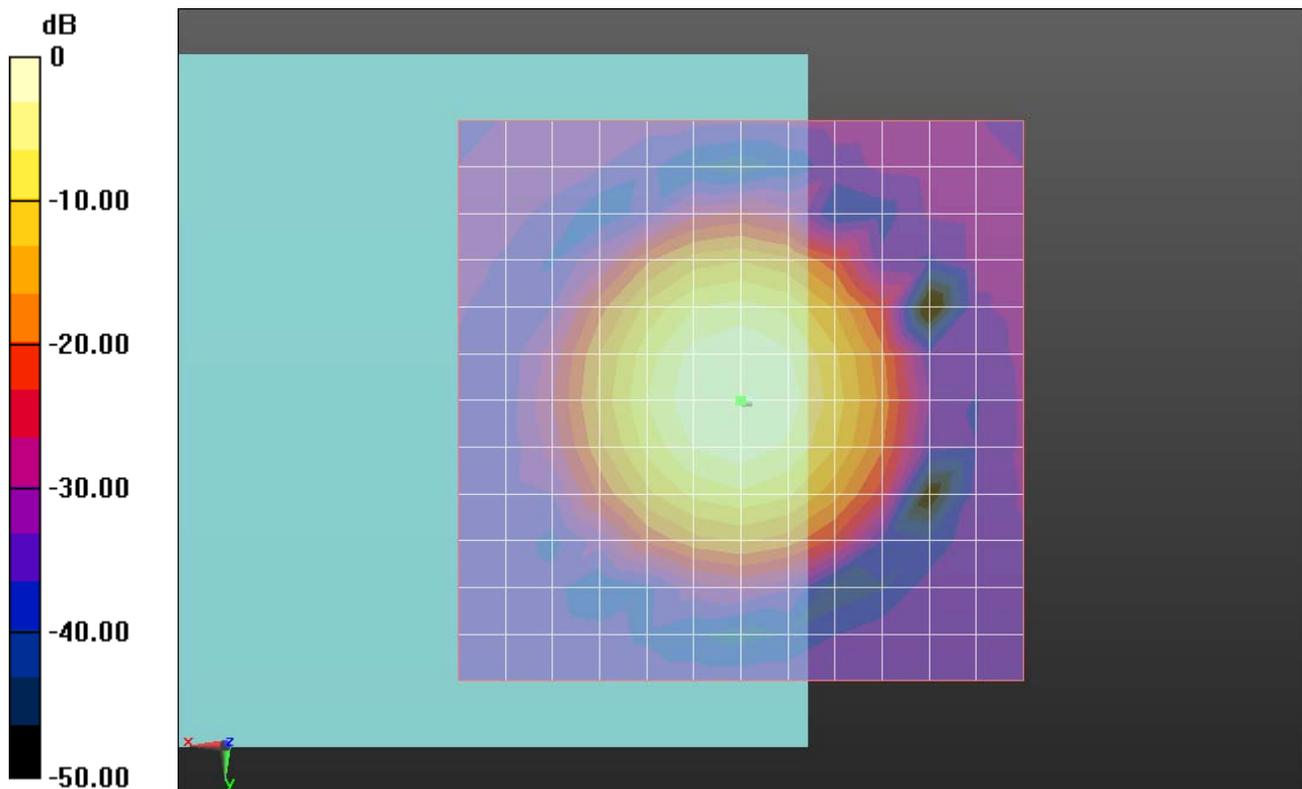- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)

Ch1413/z (axial) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):
Measurement grid: dx=10mm, dy=10mm
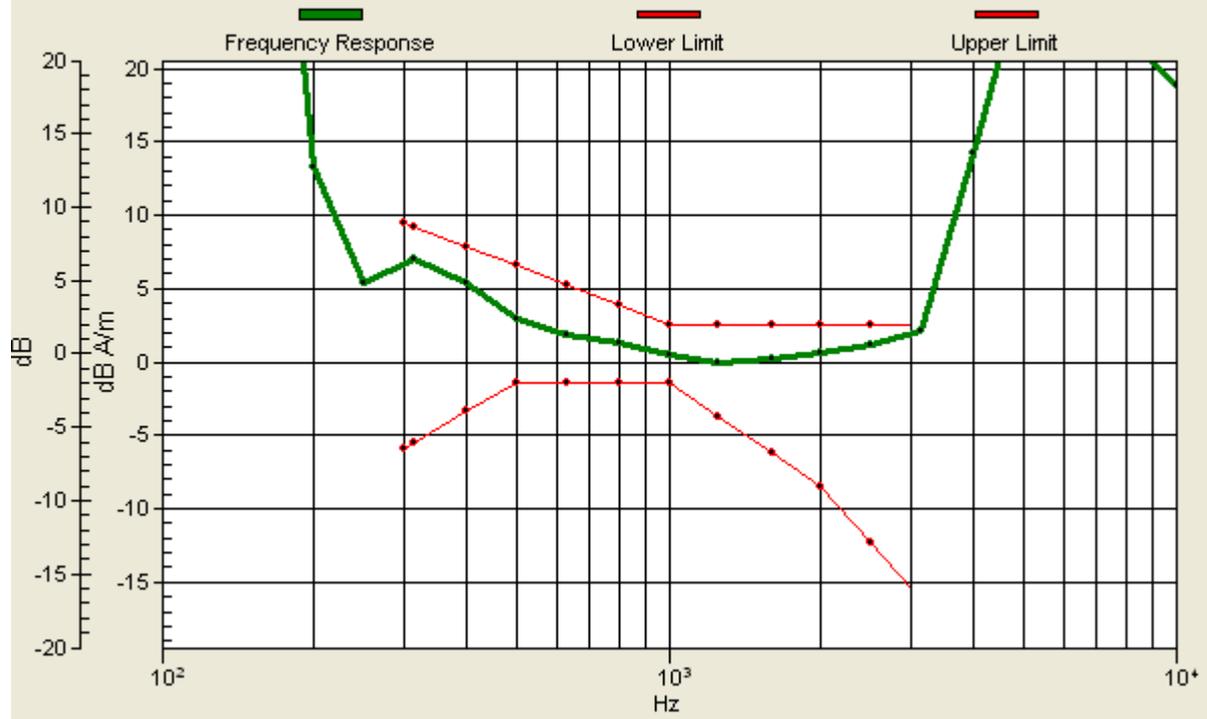ABM1/ABM2 = 42.74 dB
ABM1 comp = 1.24 dB A/m
Location: 0, 0, 3.7 mm

0 dB = 1.000A/m

Ch1413/z (axial) wideband at best S/N/ABM [HAC-2007] Freq Resp(x,y,z,f)

Loc: 0, 0, 3.7 mm Diff: 0.6dB

| ▬▬ Frequency Response | ▬ Lower Limit | ▬ Upper Limit |

04 HAC T-Coil_WCDMA Band IV_RMC 12.2Kbps_Ch1413(X)

DUT: 331403-03B

Communication System: UMTS; Frequency: 1732.6 MHz;Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3

Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)
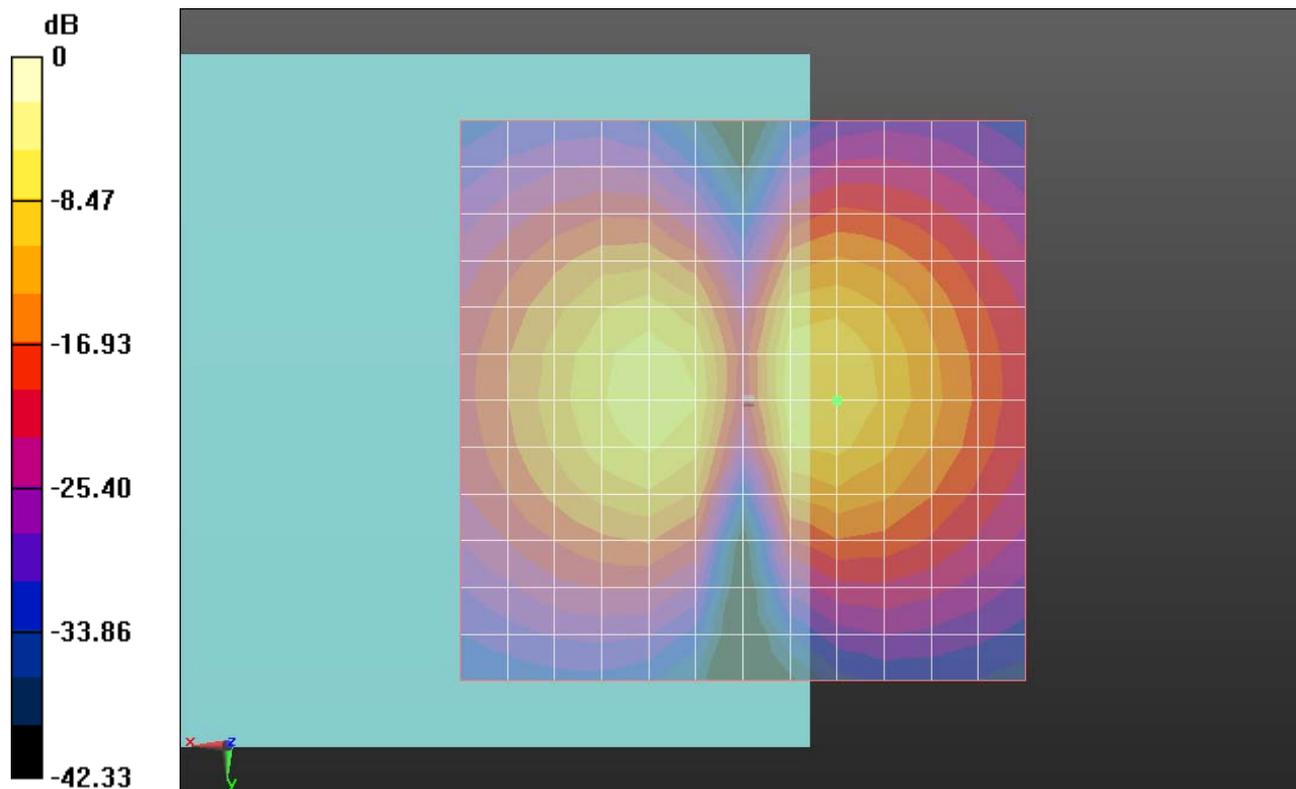
Ch1413/x (longitudinal) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm

ABM1/ABM2 = 43.84 dB

ABM1 comp = -5.76 dB A/m

Location: -8.3, 0, 3.7 mm

0 dB = 1.000A/m

04 HAC T-Coil_WCDMA Band IV_RMC 12.2Kbps_Ch1413(Y)

DUT: 331403-03B

Communication System: UMTS; Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
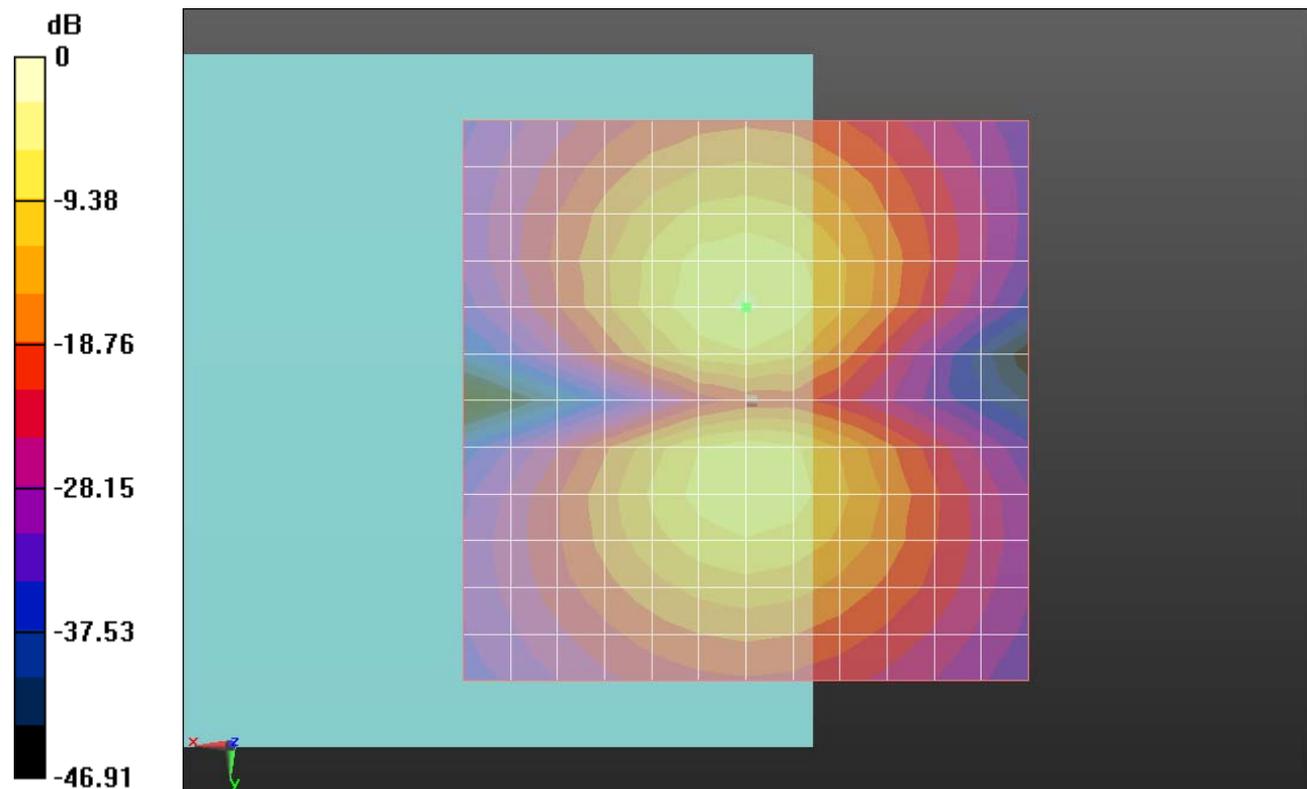- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)

Ch1413/y (transversal) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):
Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 36.47 dB
ABM1 comp = -5.69 dB A/m
Location: 0, -8.3, 3.7 mm

0 dB = 1.000A/m

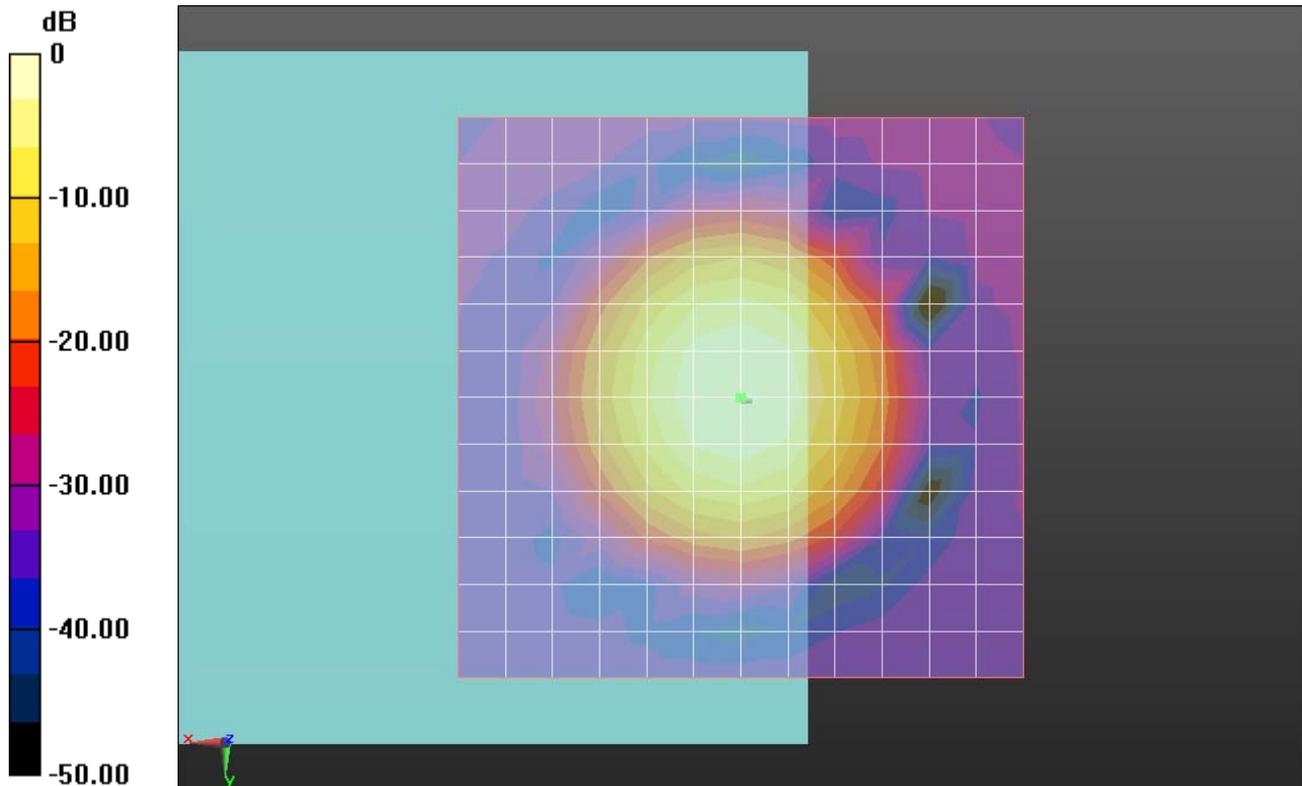## 05 HAC T-Coil_WCDMA Band II_RMC 12.2Kbps_Ch9400(Z)

DUT: 331403-03B

Communication System: UMTS; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)

Ch9400/z (axial) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):
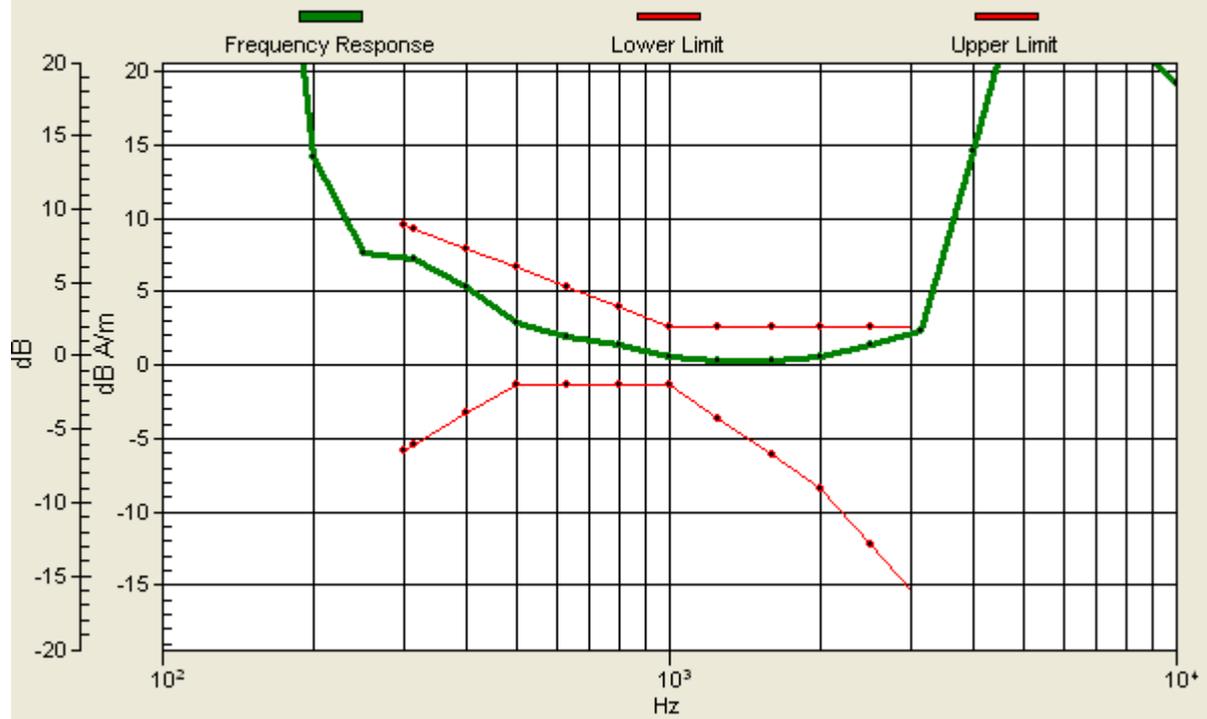Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 42.68 dB
ABM1 comp = 1.36 dB A/m
Location: 0, 0, 3.7 mm

0 dB = 1.000A/m

Ch9400/z (axial) wideband at best S/N/ABM [HAC-2007] Freq Resp(x,y,z,f)
Loc: 0, 0, 3.7 mm Diff: 0.51dB

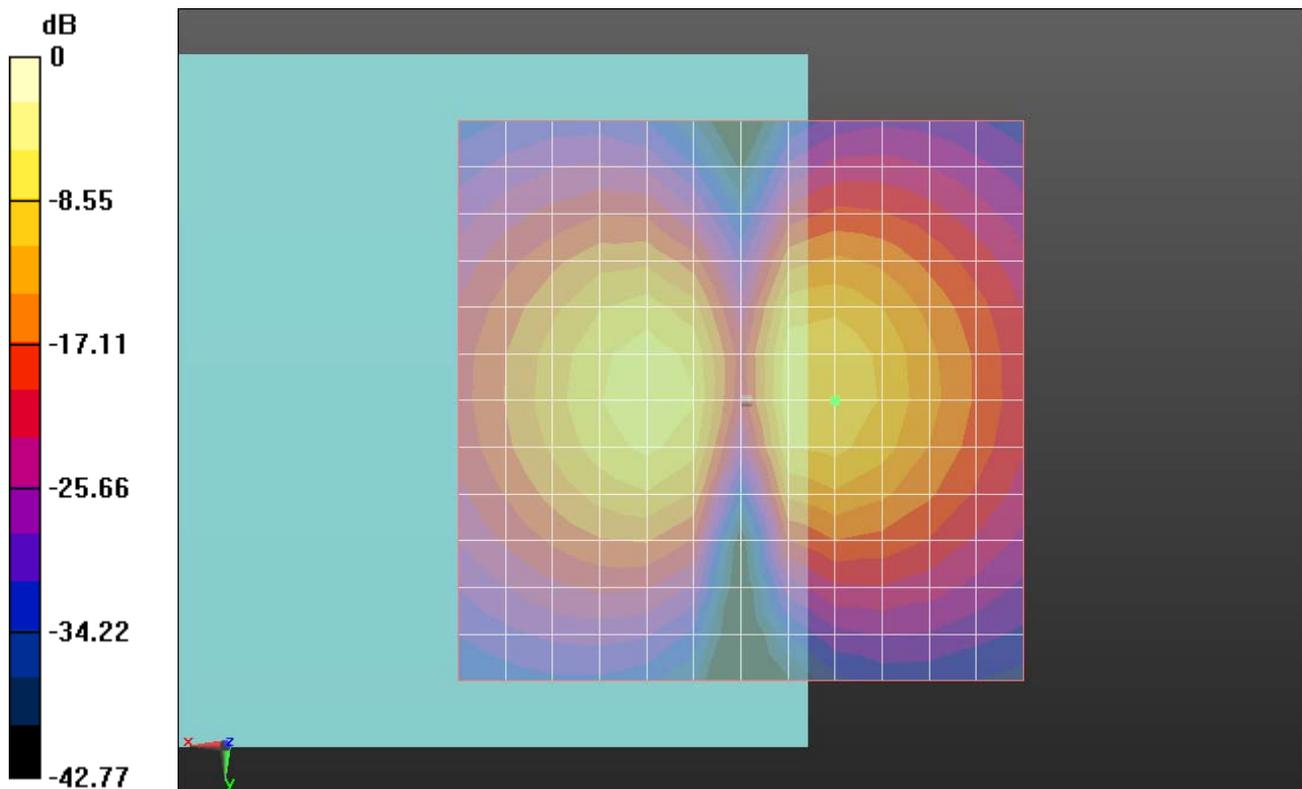**05 HAC T-Coil_WCDMA Band II_RMC 12.2Kbps_Ch9400(X)**

DUT: 331403-03B

Communication System: UMTS; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)

Ch9400/x (longitudinal) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):
Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 43.99 dB
ABM1 comp = -5.64 dB A/m
Location: -8.3, 0, 3.7 mm

0 dB = 1.000A/m

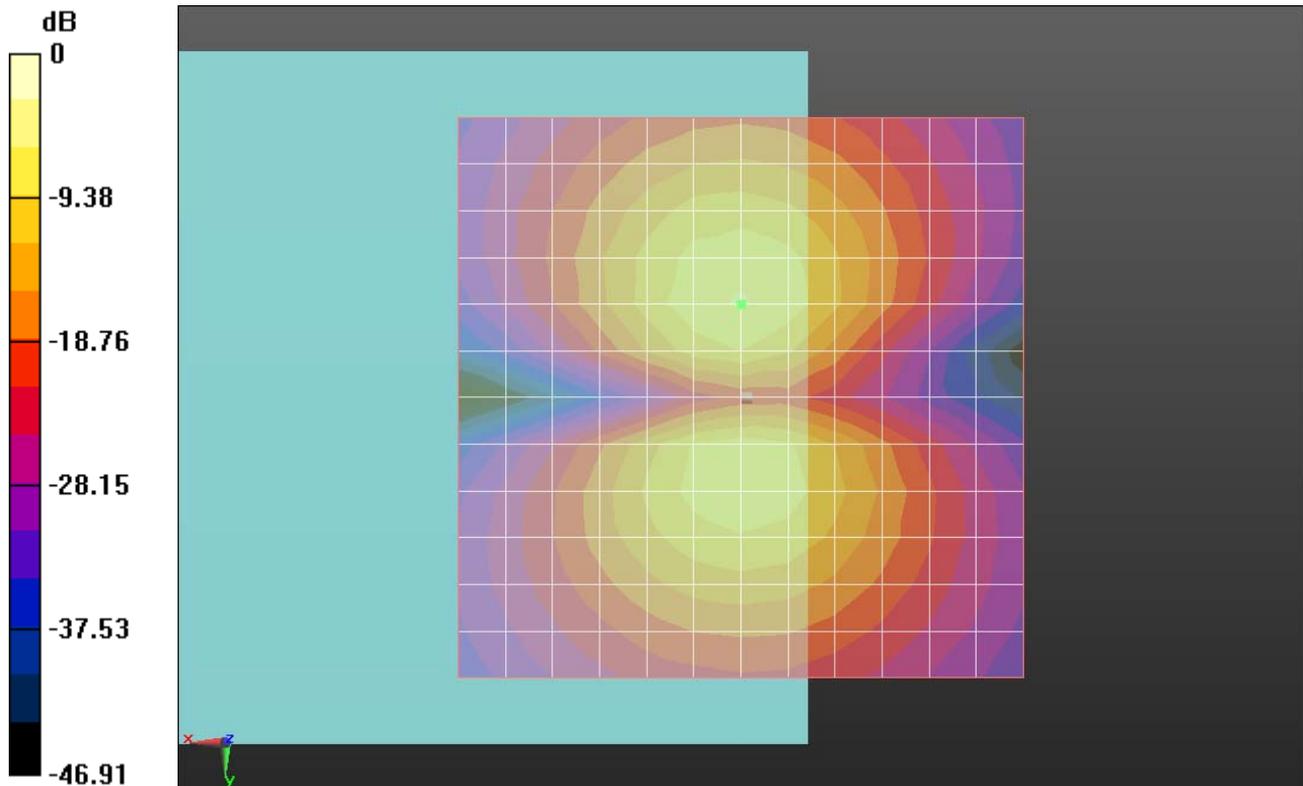## 05 HAC T-Coil_WCDMA Band II_RMC 12.2Kbps_Ch9400(Y)

DUT: 331403-03B

Communication System: UMTS; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3093; ; Calibrated: 2013-5-7
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1210; Calibrated: 2013-6-19
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (5); SEMCAD X Version 14.4.5 (3634)

Ch9400/y (transversal) 4.2mm 50 x 50/ABM [HAC-2007] SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 36.29 dB
ABM1 comp = -5.84 dB A/m
Location: 0, -8.3, 3.7 mm

0 dB = 1.000A/m