



Appendix A. Plots of T-Coil Measurement

The plots are shown as follows.

01 HAC T-Coil_CDMA2000 BC1_RC1 SO3_Ch25(Z)

DUT: 331405B

Communication System: CDMA2000; Frequency: 1851.25 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0 \text{ S/m}$, $\epsilon_r = 1$; $\rho = 0 \text{ kg/m}^3$

Ambient Temperature : 23.2 °C

DASY5 Configuration:

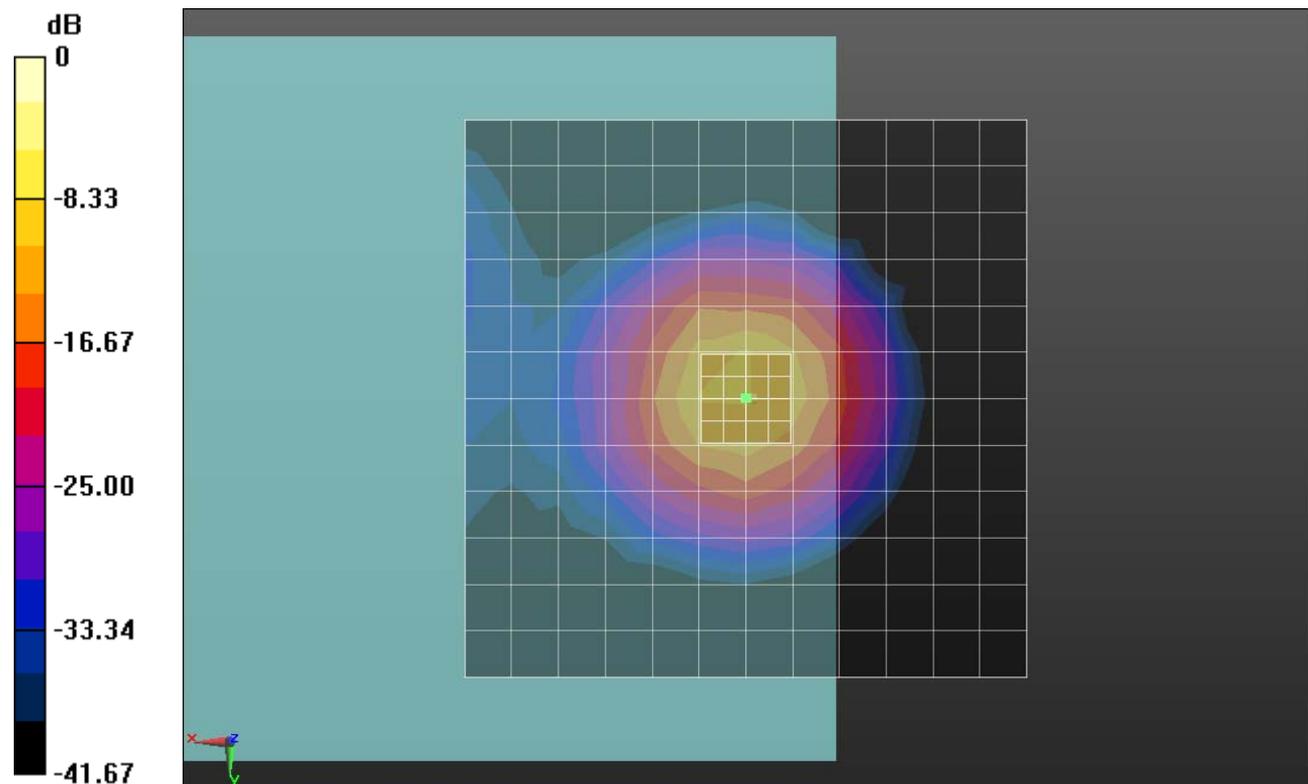
- Probe: AM1DV3 - 3067; ; Calibrated: 2013-1-10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn679; Calibrated: 2013-1-16
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

Ch25/z (axial) fine 2mm 8 x 8/ABM SNR(x,y,z) (5x5x1): Measurement grid: dx=10mm, dy=10mm

ABM1/ABM2 = 31.82 dB

ABM1 comp = -8.85 dBA/m

Location: 0, 0, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Ch25/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, 0, 3.7 mm Diff: 1.04dB



01 HAC T-Coil_CDMA2000 BC1_RC1 SO3_Ch25(Y)

DUT: 331405B

Communication System: CDMA2000; Frequency: 1851.25 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3067; ; Calibrated: 2013-1-10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn679; Calibrated: 2013-1-16
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

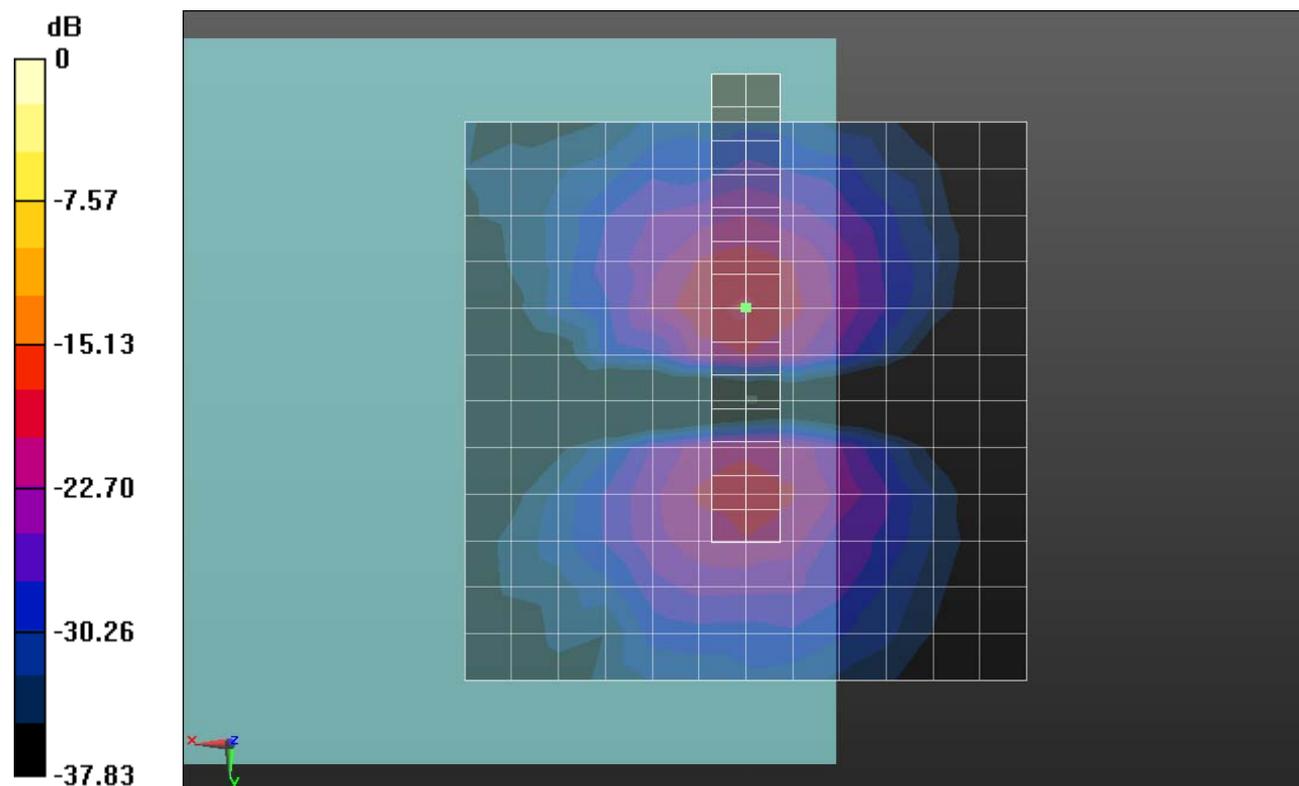
Ch25/y (transversal) fine 3mm 6 x 42/ABM SNR(x,y,z) (3x15x1): Measurement grid:

dx=10mm, dy=10mm

ABM1/ABM2 = 26.19 dB

ABM1 comp = -17.02 dBA/m

Location: 0, -8.3, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

02 HAC T-Coil_CDMA2000 BC1_RC1 SO3_Ch600(Z)

DUT: 331405B

Communication System: CDMA2000; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0 \text{ S/m}$, $\epsilon_r = 1$; $\rho = 0 \text{ kg/m}^3$

Ambient Temperature : 23.2 °C

DASY5 Configuration:

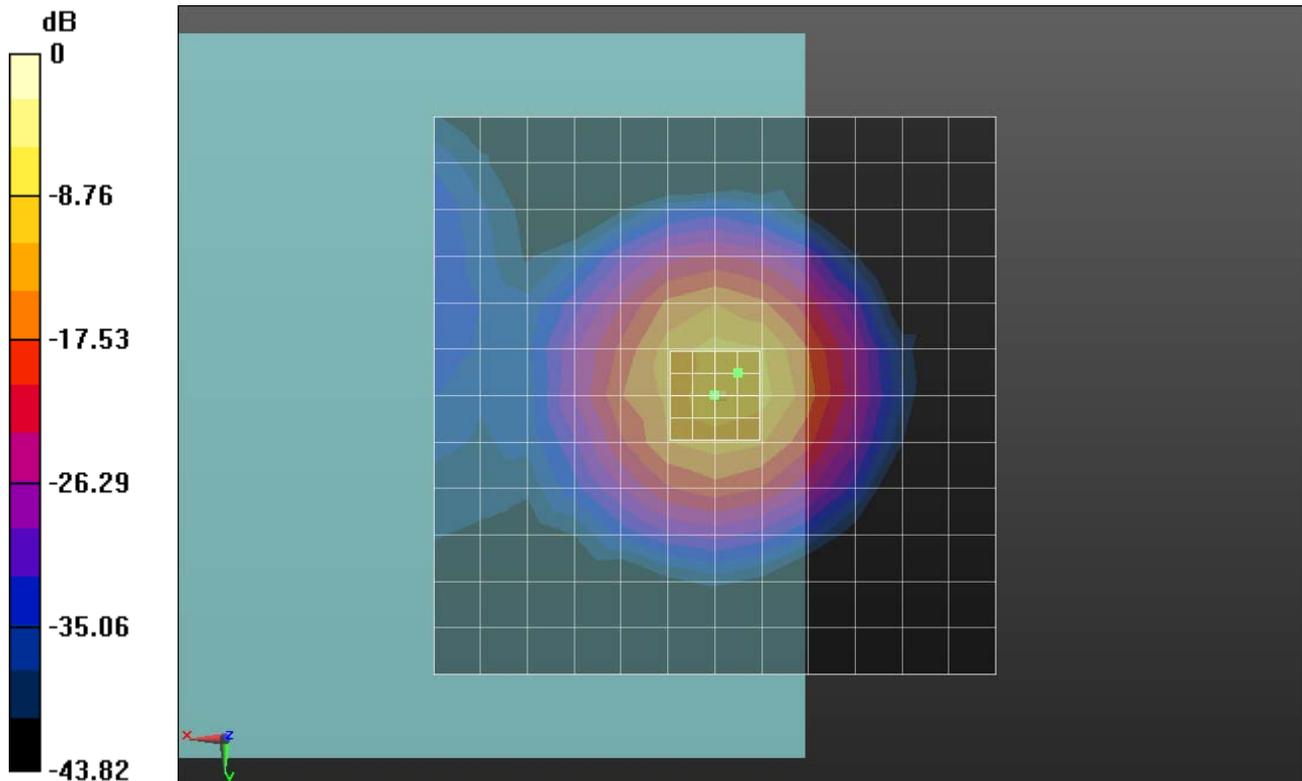
- Probe: AM1DV3 - 3067; ; Calibrated: 2013-1-10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn679; Calibrated: 2013-1-16
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

Ch600/z (axial) fine 2mm 8 x 8/ABM SNR(x,y,z) (5x5x1): Measurement grid: dx=10mm, dy=10mm

ABM1/ABM2 = 32.80 dB

ABM1 comp = -9.22 dBA/m

Location: -2, -2, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Ch600/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: -2, -2, 3.7 mm Diff: 0.45dB



02 HAC T-Coil_CDMA2000 BC1_RC1 SO3_Ch600(Y)

DUT: 33140

Communication System: CDMA2000; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0 \text{ S/m}$, $\epsilon_r = 1$; $\rho = 0 \text{ kg/m}^3$

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3067; ; Calibrated: 2013-1-10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn679; Calibrated: 2013-1-16
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

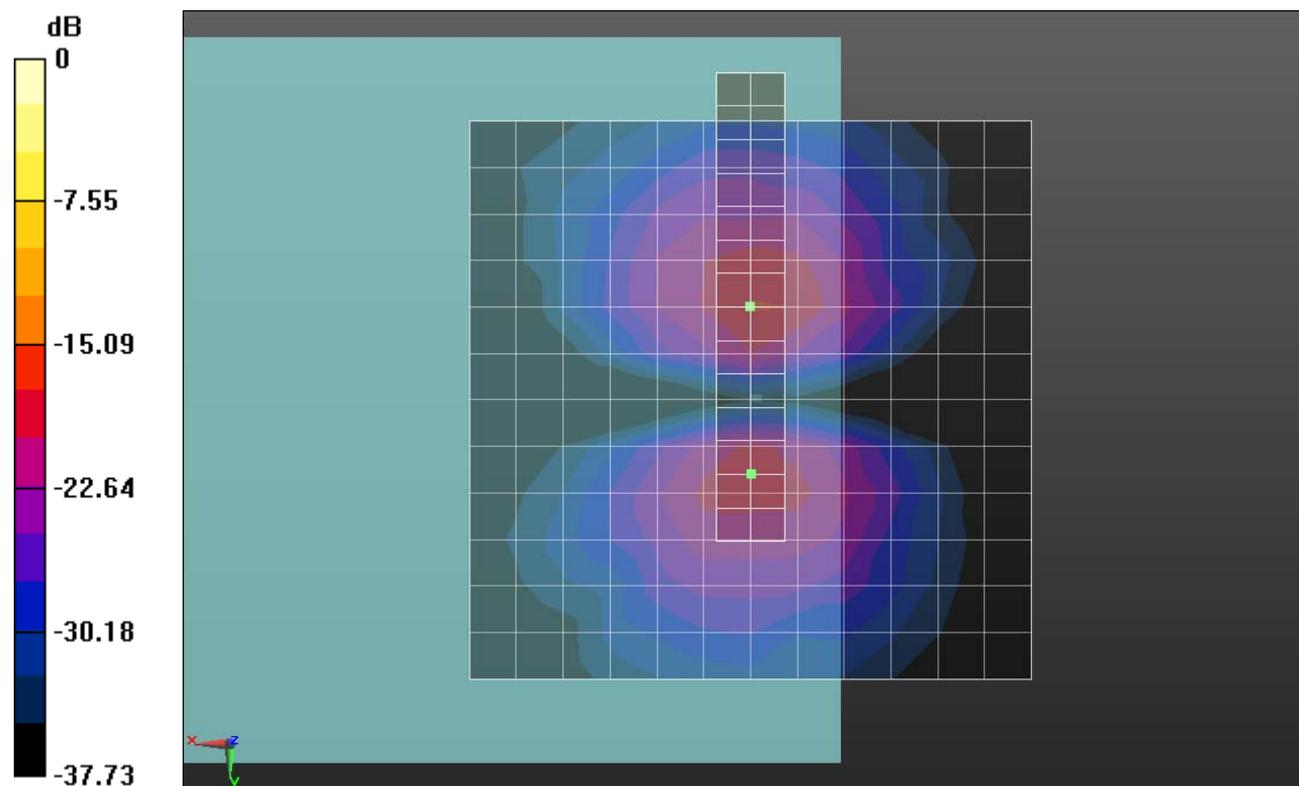
Ch600/y (transversal) fine 3mm 6 x 42/ABM SNR(x,y,z) (3x15x1): Measurement grid:

dx=10mm, dy=10mm

ABM1/ABM2 = 26.40 dB

ABM1 comp = -17.80 dBA/m

Location: 0, 6.7, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

03 HAC T-Coil_CDMA2000 BC1_RC1 SO3_Ch1175(Z)

DUT: 331405B

Communication System: CDMA2000; Frequency: 1908.75 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0 \text{ S/m}$, $\epsilon_r = 1$; $\rho = 0 \text{ kg/m}^3$

Ambient Temperature : 23.2 °C

DASY5 Configuration:

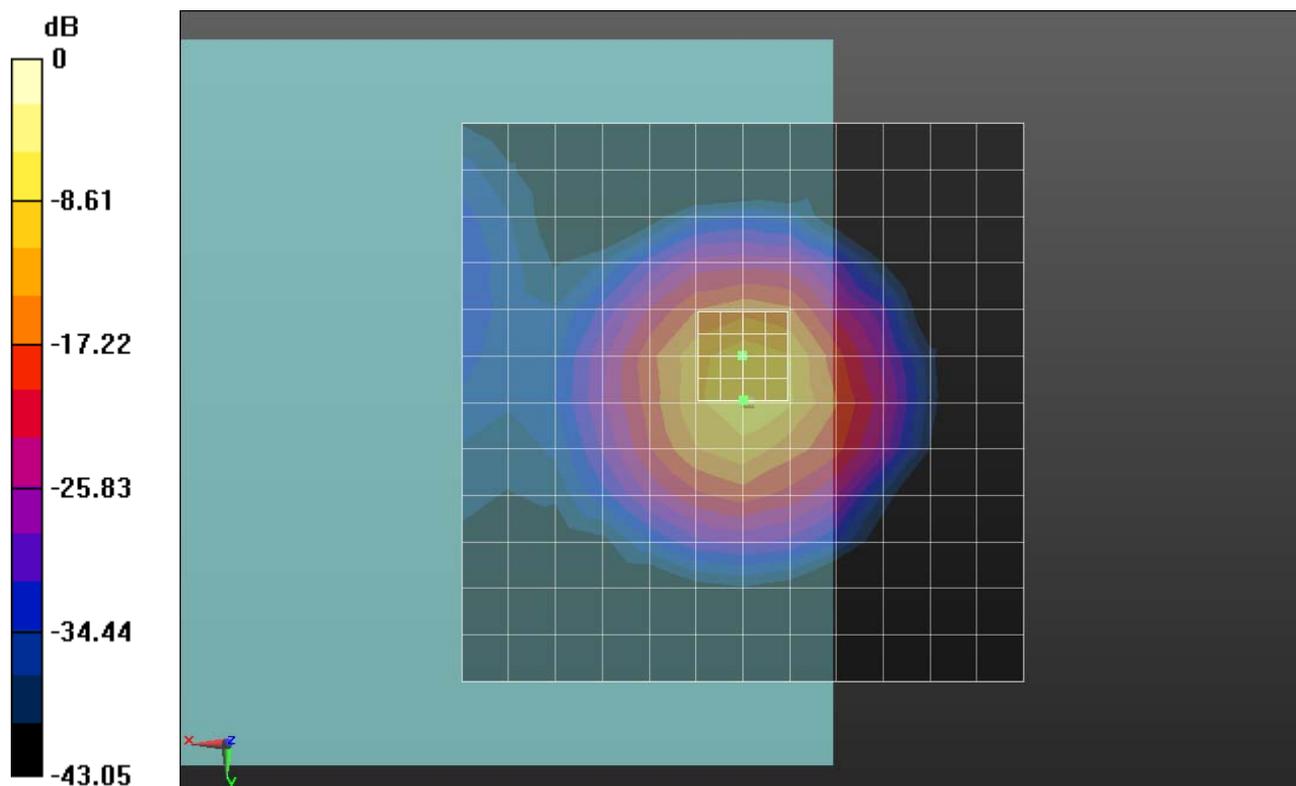
- Probe: AM1DV3 - 3067; ; Calibrated: 2013-1-10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn679; Calibrated: 2013-1-16
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

Ch1175/z (axial) fine 2mm 8 x 8/ABM SNR(x,y,z) (5x5x1): Measurement grid: dx=10mm, dy=10mm

ABM1/ABM2 = 32.81 dB

ABM1 comp = -8.60 dBA/m

Location: 0, -0.2, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Ch1175/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, -0.2, 3.7 mm Diff: 0.44dB



03 HAC T-Coil_CDMA2000 BC1_RC1 SO3_Ch1175(Y)

DUT: 331405B

Communication System: CDMA2000; Frequency: 1908.75 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3067; ; Calibrated: 2013-1-10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn679; Calibrated: 2013-1-16
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

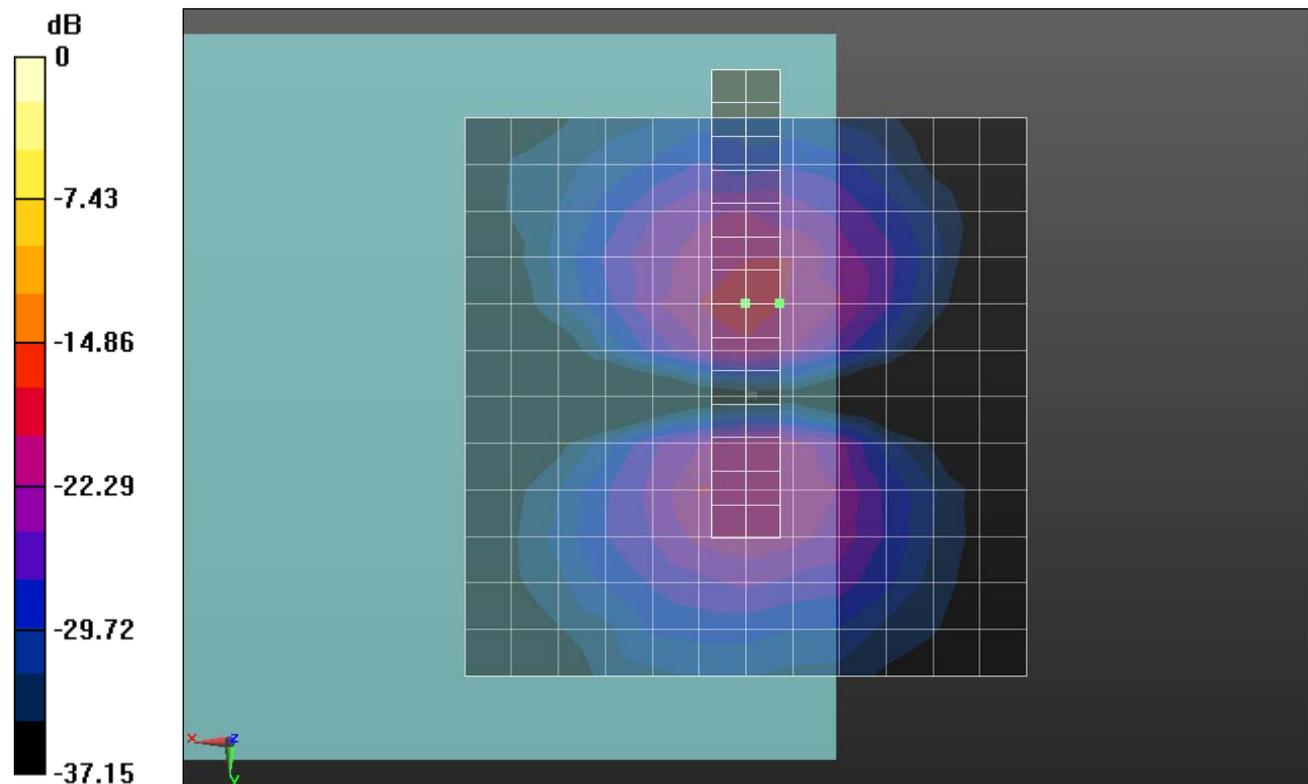
Ch1175/y (transversal) fine 3mm 6 x 42/ABM SNR(x,y,z) (3x15x1): Measurement grid:

dx=10mm, dy=10mm

ABM1/ABM2 = 28.00 dB

ABM1 comp = -17.07 dBA/m

Location: -3, -8.3, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

04 HAC T-Coil_CDMA2000 BC10_RC1 SO3_Ch476(Z)

DUT: 331405B

Communication System: CDMA2000; Frequency: 817.9 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0 \text{ S/m}$, $\epsilon_r = 1$; $\rho = 0 \text{ kg/m}^3$

Ambient Temperature : 23.2 °C

DASY5 Configuration:

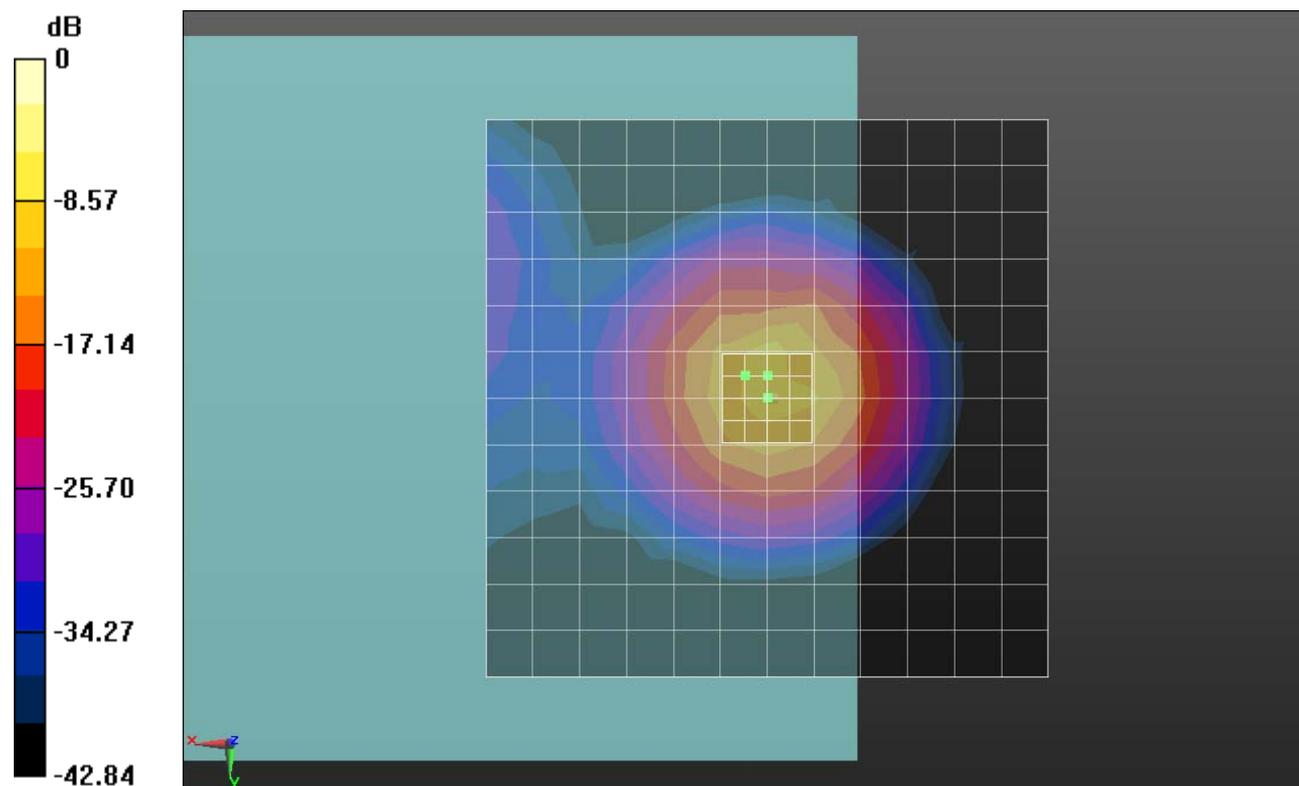
- Probe: AM1DV3 - 3067; ; Calibrated: 2013-1-10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn679; Calibrated: 2013-1-16
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

Ch476/z (axial) fine 2mm 8 x 8/ABM SNR(x,y,z) (5x5x1): Measurement grid: dx=10mm, dy=10mm

ABM1/ABM2 = 32.65 dB

ABM1 comp = -9.07 dBA/m

Location: 2, -2, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

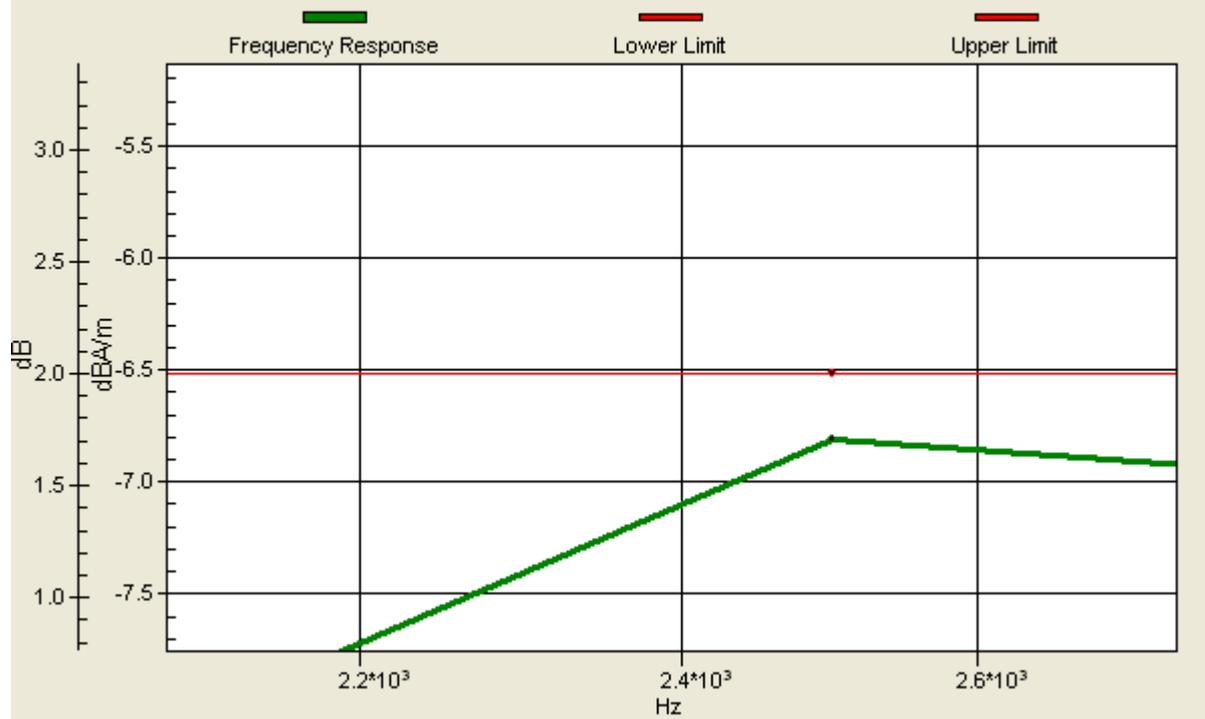
Ch476/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 2, -2, 3.7 mm Diff: 0.29dB



Ch476/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 2, -2, 3.7 mm Diff: 0.29dB



04 HAC T-Coil_CDMA2000 BC10_RC1 SO3_Ch476(Y)

DUT: 331405B

Communication System: CDMA2000; Frequency: 817.9 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3067; ; Calibrated: 2013-1-10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn679; Calibrated: 2013-1-16
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

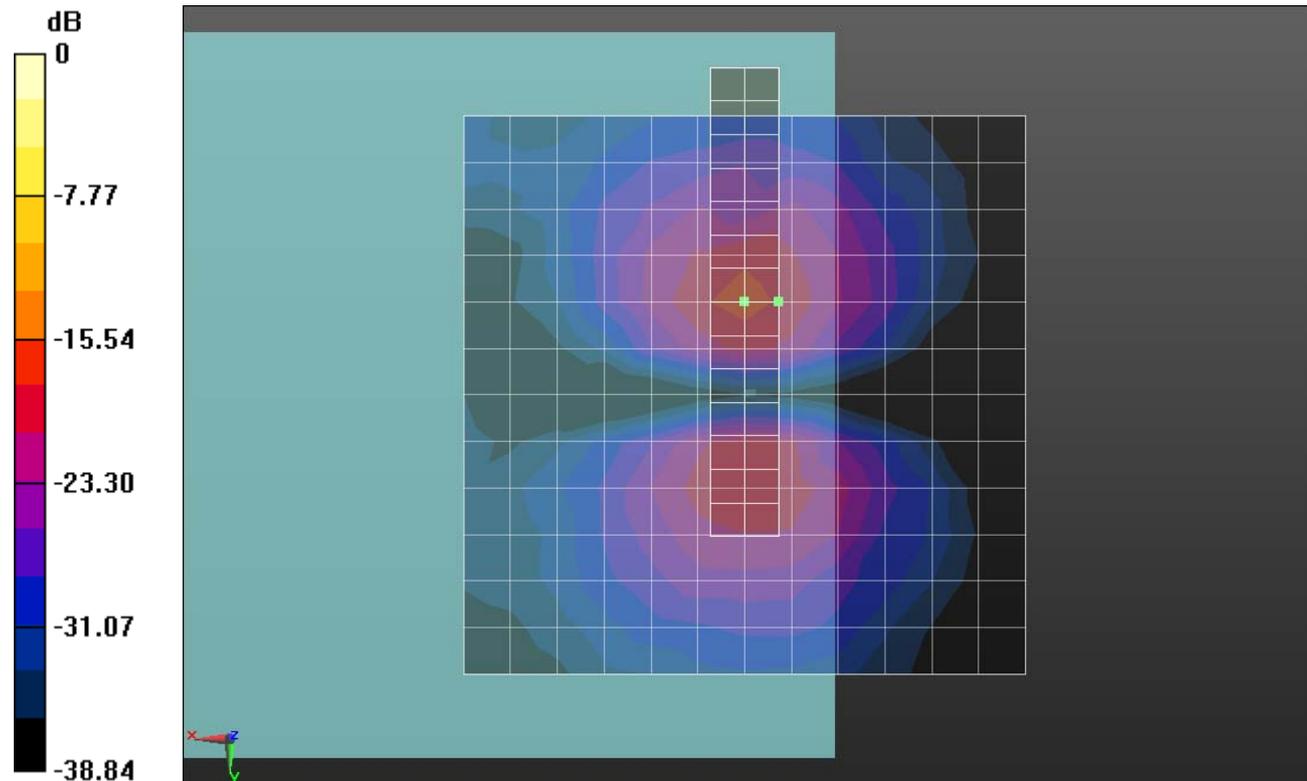
Ch476/y (transversal) fine 3mm 6 x 42/ABM SNR(x,y,z) (3x15x1): Measurement grid:

dx=10mm, dy=10mm

ABM1/ABM2 = 26.58 dB

ABM1 comp = -17.63 dBA/m

Location: -3, -8.3, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

05 HAC T-Coil_CDMA2000 BC10_RC1 SO3_Ch580(Z)

DUT: 331405B

Communication System: CDMA2000; Frequency: 820.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Ambient Temperature : 23.2 °C

DASY5 Configuration:

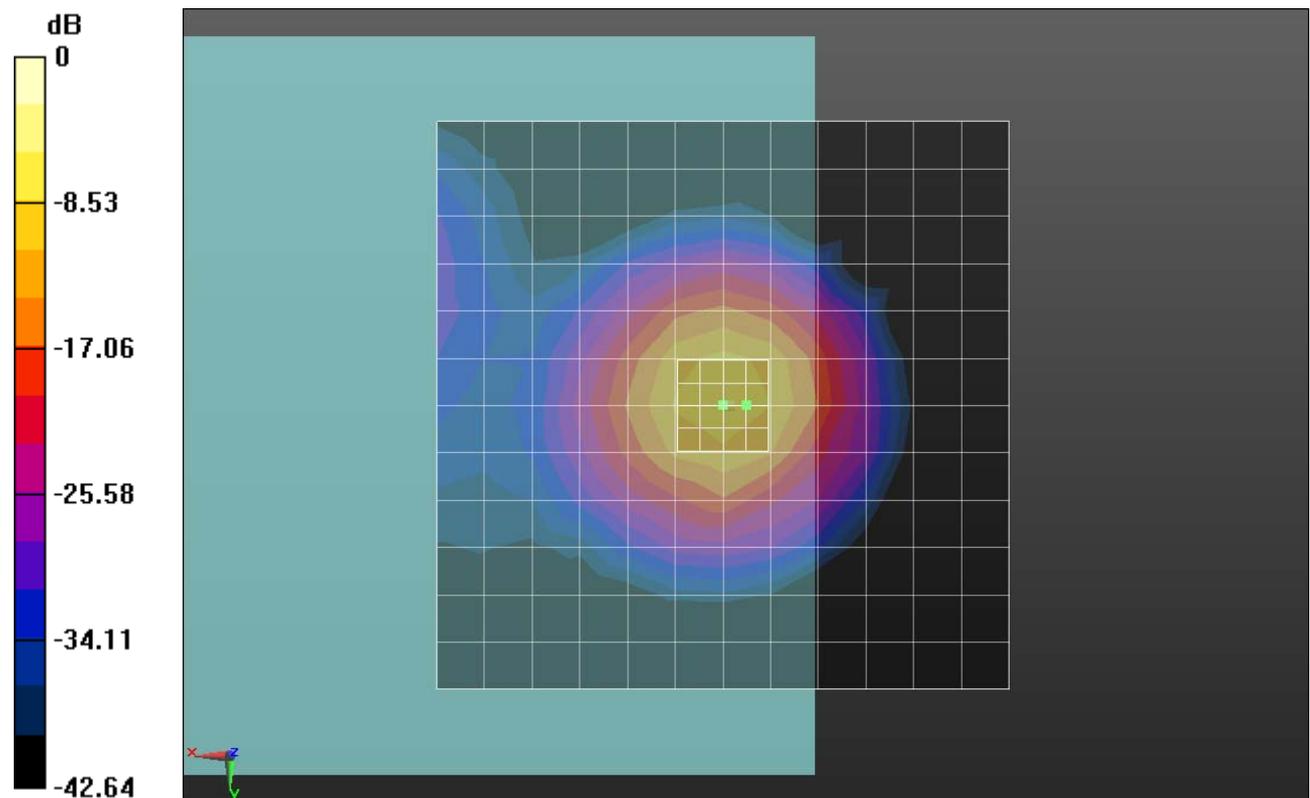
- Probe: AM1DV3 - 3067; ; Calibrated: 2013-1-10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn679; Calibrated: 2013-1-16
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

Ch580/z (axial) fine 2mm 8 x 8/ABM SNR(x,y,z) (5x5x1): Measurement grid: dx=10mm, dy=10mm

ABM1/ABM2 = 33.27 dB

ABM1 comp = -8.77 dBA/m

Location: -2, 0, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Ch580/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: -2, 0, 3.7 mm Diff: 0.35dB



05 HAC T-Coil_CDMA2000 BC10_RC1 SO3_Ch580(Y)

DUT: 331405B

Communication System: CDMA2000; Frequency: 820.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3067; ; Calibrated: 2013-1-10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn679; Calibrated: 2013-1-16
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

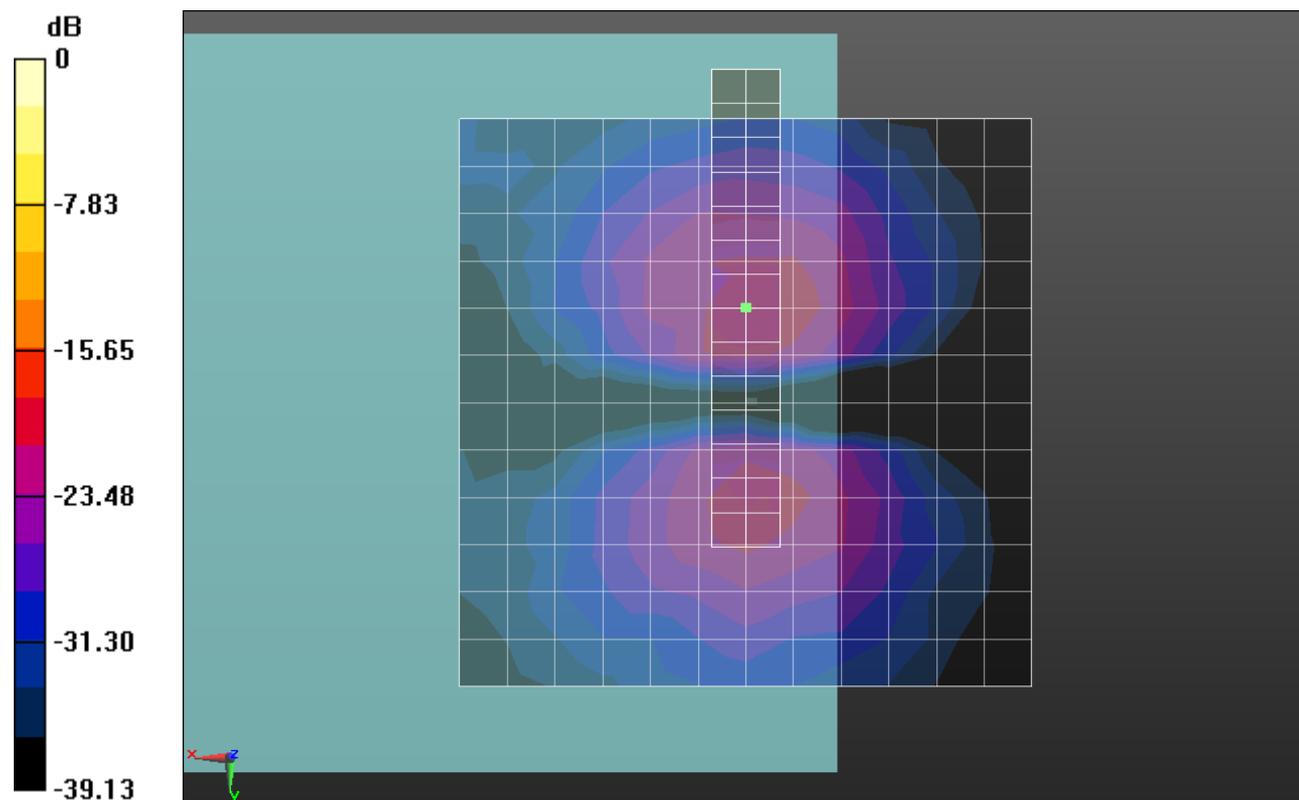
Ch580/y (transversal) fine 3mm 6 x 42/ABM SNR(x,y,z) (3x15x1): Measurement grid:

dx=10mm, dy=10mm

ABM1/ABM2 = 26.21 dB

ABM1 comp = -17.57 dBA/m

Location: 0, -8.3, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

06 HAC T-Coil_CDMA2000 BC10_RC1 SO3_Ch684(Z)

DUT: 331405B

Communication System: CDMA2000; Frequency: 823.1 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Ambient Temperature : 23.2 °C

DASY5 Configuration:

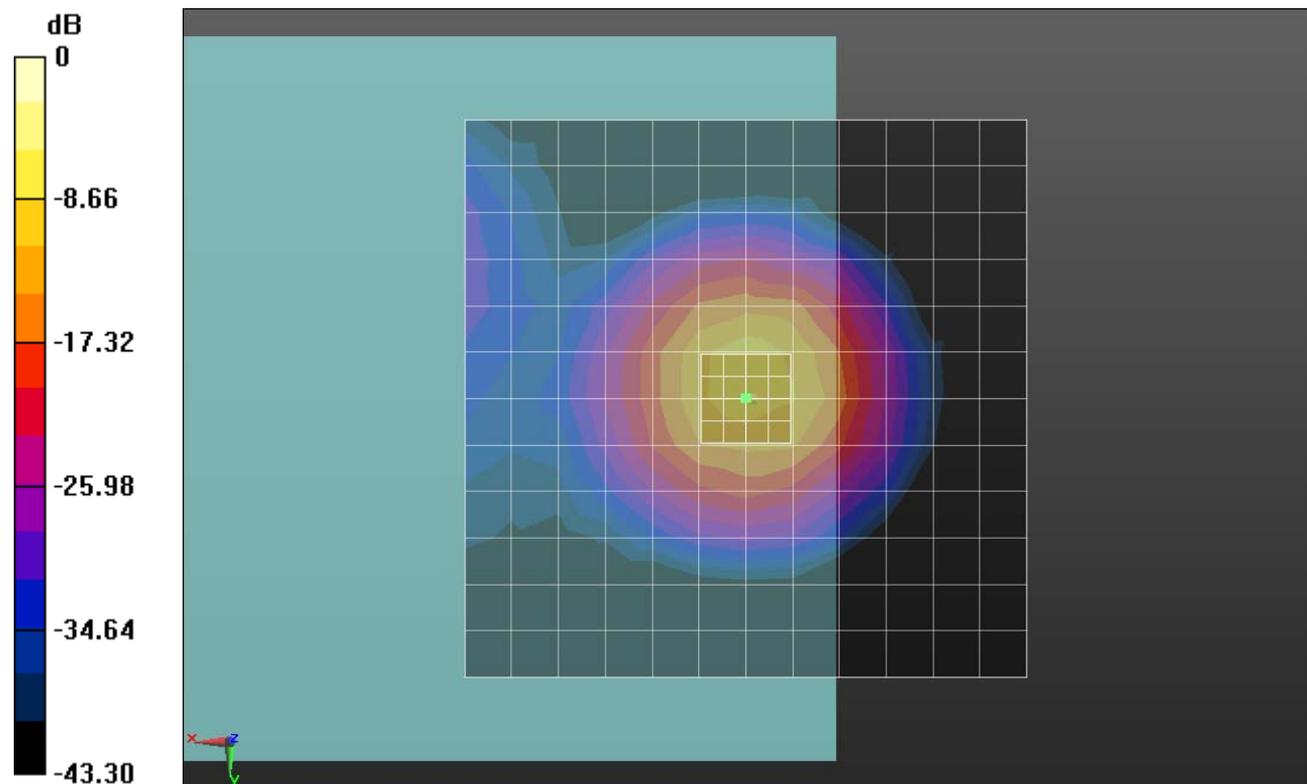
- Probe: AM1DV3 - 3067; ; Calibrated: 2013-1-10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn679; Calibrated: 2013-1-16
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

C684/z (axial) fine 2mm 8 x 8/ABM SNR(x,y,z) (5x5x1): Measurement grid: dx=10mm, dy=10mm

ABM1/ABM2 = 31.54 dB

ABM1 comp = -9.57 dBA/m

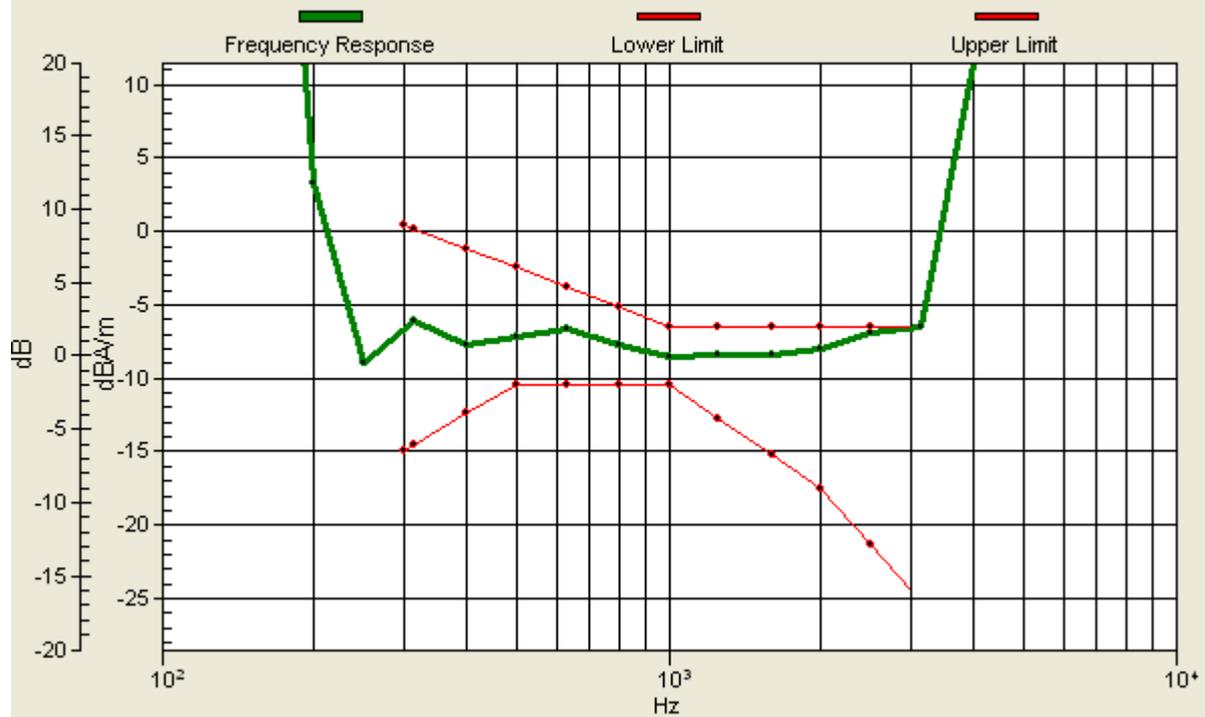
Location: 0, 0, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

C684/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, 0, 3.7 mm Diff: 0.15dB



C684/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, 0, 3.7 mm Diff: 0.15dB



06 HAC T-Coil_CDMA2000 BC10_RC1 SO3_Ch684(Y)

DUT: 331405B

Communication System: CDMA2000; Frequency: 823.1 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3067; ; Calibrated: 2013-1-10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn679; Calibrated: 2013-1-16
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (4); SEMCAD X Version 14.6.8 (7028)

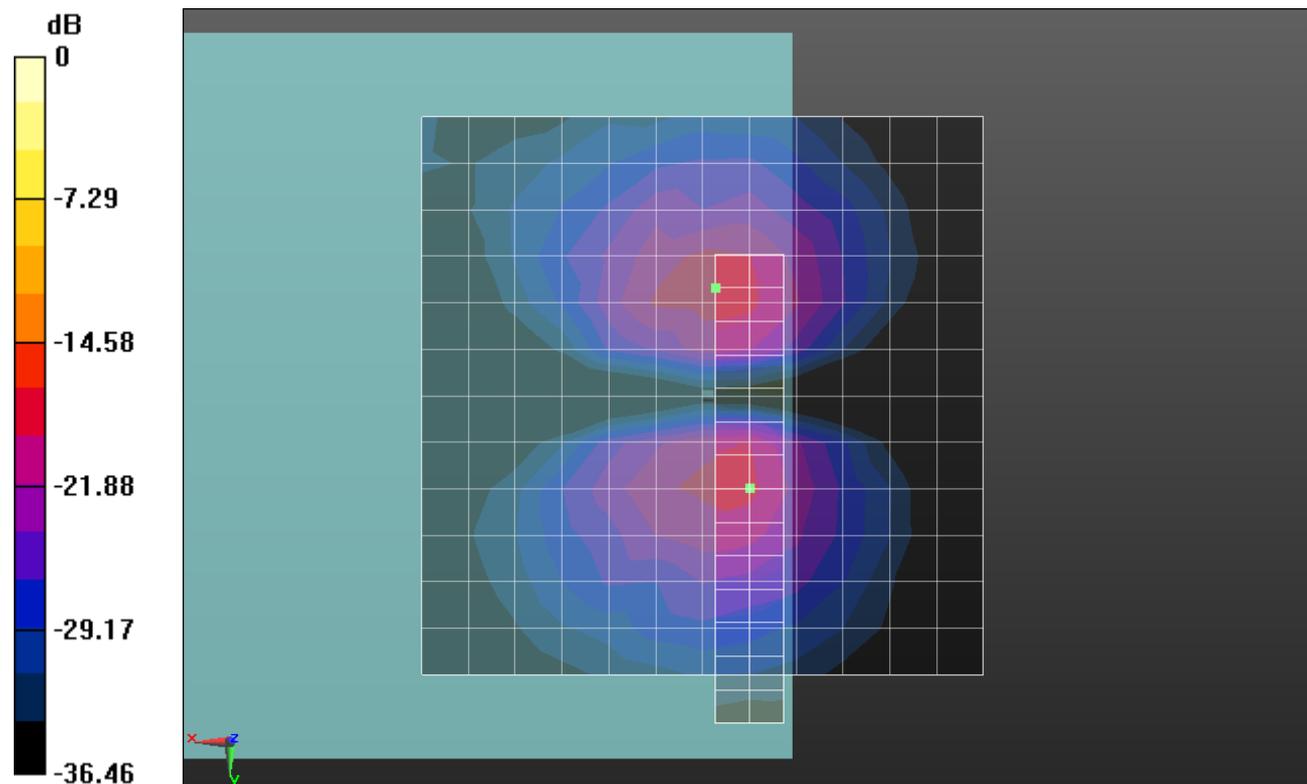
C684/y (transversal) fine 3mm 6 x 42/ABM SNR(x,y,z) (3x15x1): Measurement grid:

dx=10mm, dy=10mm

ABM1/ABM2 = 25.90 dB

ABM1 comp = -17.58 dBA/m

Location: -1.2, -9.7, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m