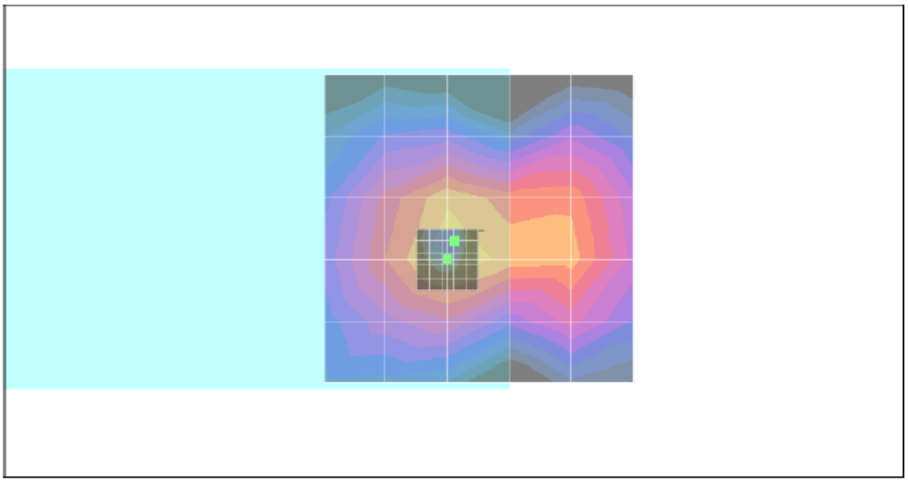
Point scan/x (longitudinal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.107986 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 24.0 dB
ABM1 comp = -8.42 dB A/m
BWC Factor = 0.107986 dB
Location: 4, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM850 CH128_Open Y transversal

DUT: 821901

Communication System: GSM850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.3 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/y (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.110988 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

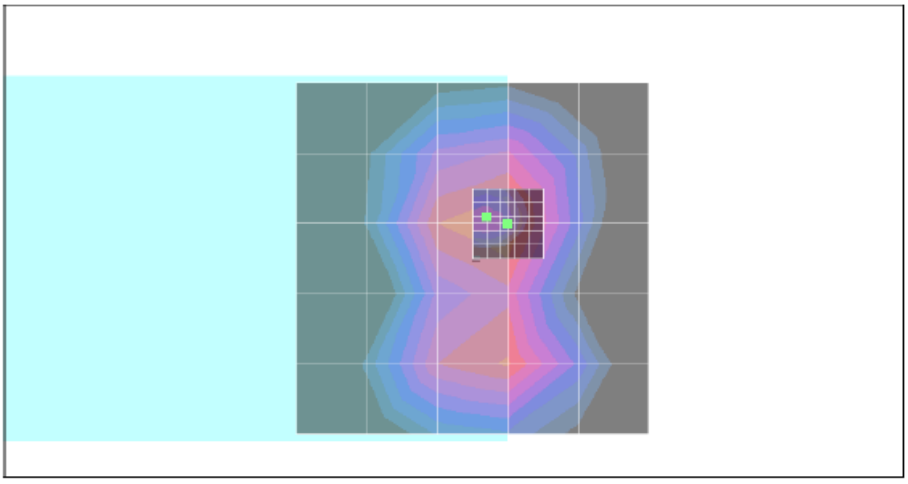
Cursor:
ABM1 comp = -10.8 dB A/m
BWC Factor = 0.110988 dB
Location: -5, -5, 363.7 mm

Fine scan/y (transversal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.109959 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.64 dB A/m
BWC Factor = 0.109959 dB
Location: -2, -6, 363.7 mm

Point scan/y (transversal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.107986 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 25.1 dB
ABM1 comp = -8.94 dB A/m
BWC Factor = 0.107986 dB
Location: -2, -6, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM850 CH128_Open Z Axial

DUT: 821901

Communication System: GSM850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.3 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/z (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.110988 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -4.15 dB A/m
BWC Factor = 0.110988 dB
Location: -5, 5, 363.7 mm

Fine scan/z (axial) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.109959 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

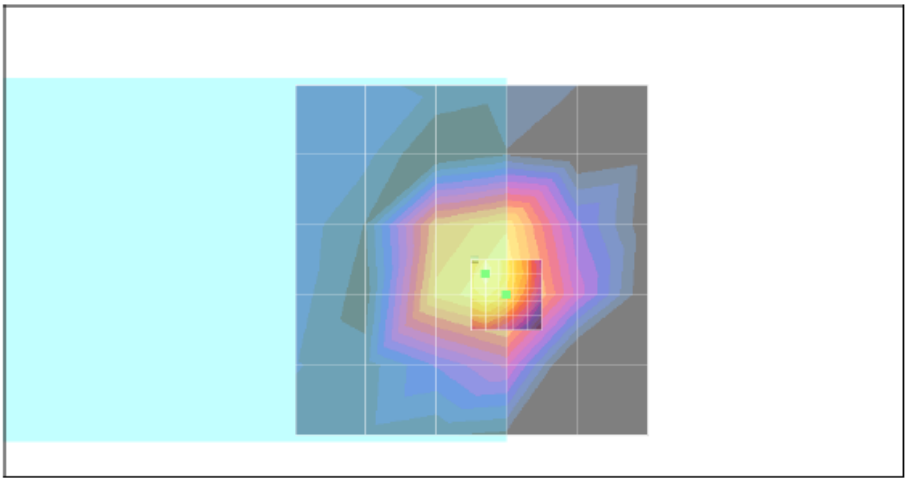
Cursor:
ABM1 comp = -0.567 dB A/m
BWC Factor = 0.109959 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.107986 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 29.1 dB
ABM1 comp = -2.75 dB A/m
BWC Factor = 0.107986 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav
Output Gain: 70.29
Measure Window Start: 2000ms
Measure Window Length: 2000ms
BWC applied: 10.8 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
Diff = 1.07 dB
BWC Factor = 10.8 dB
Location: -2, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM850 CH189_Open X longitudinal

DUT: 821901

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.2 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/x (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.0992319 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

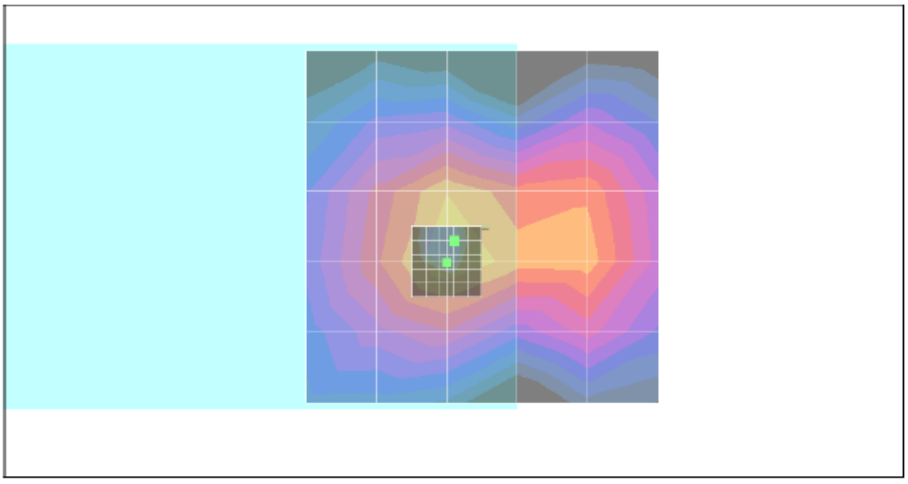
Cursor:
ABM1 comp = -9.67 dB A/m
BWC Factor = 0.0992319 dB
Location: 5, 5, 363.7 mm

Fine scan/x (longitudinal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.100005 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.32 dB A/m
BWC Factor = 0.100005 dB
Location: 4, 2, 363.7 mm

Point scan/x (longitudinal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.099833 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 24.2 dB
ABM1 comp = -8.57 dB A/m
BWC Factor = 0.099833 dB
Location: 4, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM850 CH189_Open Y transversal

DUT: 821901

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.2 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/y (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.0992319 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

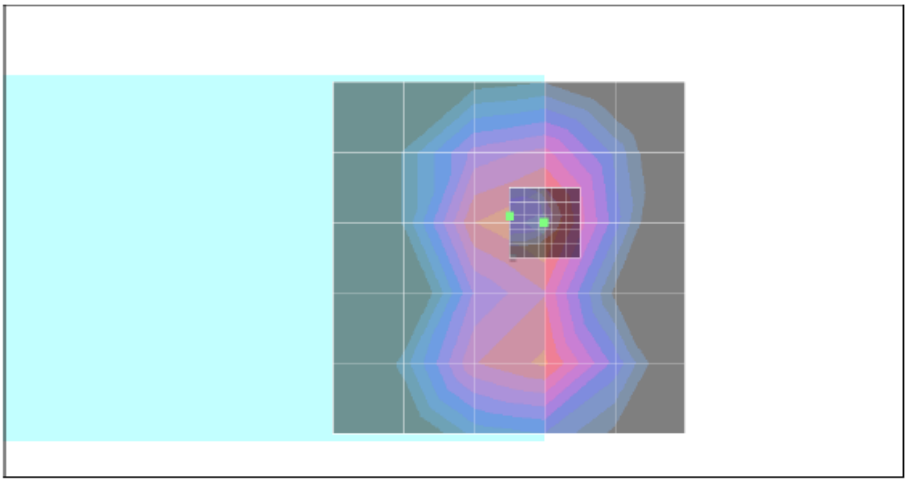
Cursor:
ABM1 comp = -10.5 dB A/m
BWC Factor = 0.0992319 dB
Location: -5, -5, 363.7 mm

Fine scan/y (transversal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.100005 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.76 dB A/m
BWC Factor = 0.100005 dB
Location: 0, -6, 363.7 mm

Point scan/y (transversal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.099833 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 24.5 dB
ABM1 comp = -9.33 dB A/m
BWC Factor = 0.099833 dB
Location: 0, -6, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM850 CH189_Open Z Axial

DUT: 821901

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.1 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/z (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.0992319 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -3.63 dB A/m
BWC Factor = 0.0992319 dB
Location: -5, 5, 363.7 mm

Fine scan/z (axial) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.100005 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

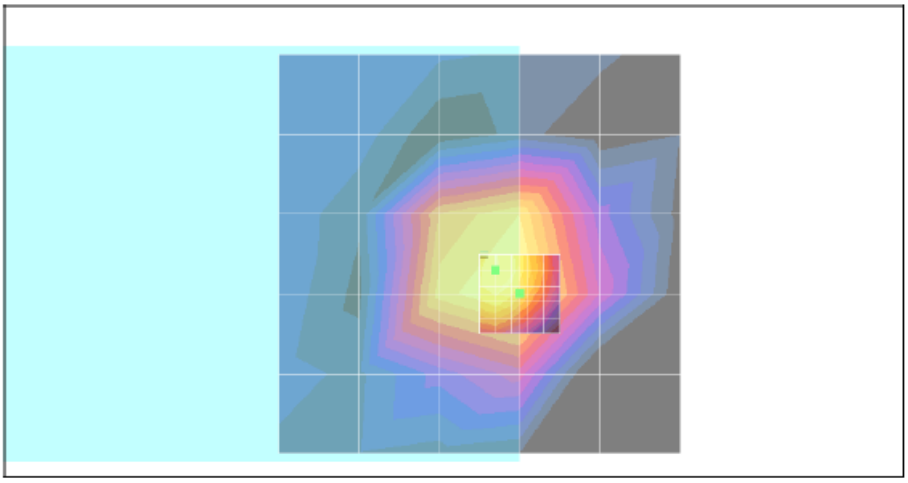
Cursor:
ABM1 comp = -0.878 dB A/m
BWC Factor = 0.100005 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.099833 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 29.1 dB
ABM1 comp = -3.04 dB A/m
BWC Factor = 0.099833 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav
Output Gain: 70.29
Measure Window Start: 2000ms
Measure Window Length: 2000ms
BWC applied: 10.8 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
Diff = 1.12 dB
BWC Factor = 10.8 dB
Location: -2, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM850 CH251_Open X longitudinal

DUT: 821901

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature：22.3 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/x (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.101035 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

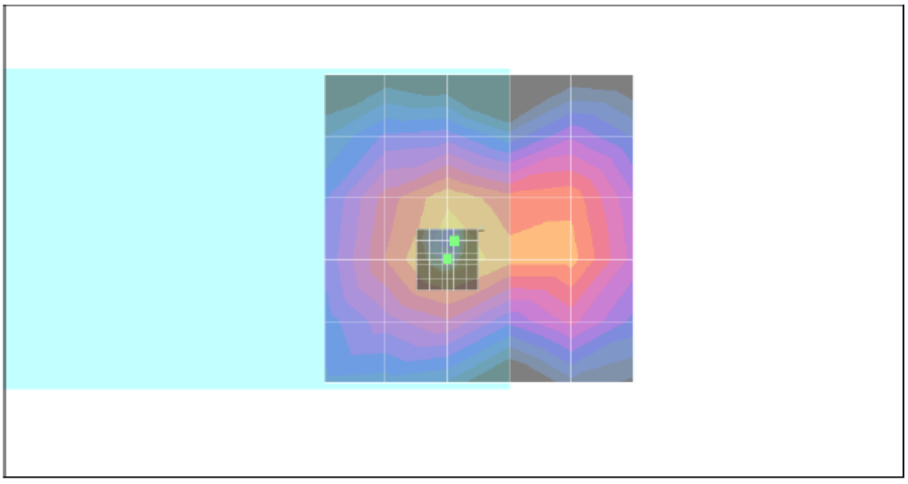
Cursor:
ABM1 comp = -9.72 dB A/m
BWC Factor = 0.101035 dB
Location: 5, 5, 363.7 mm

Fine scan/x (longitudinal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.101035 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.12 dB A/m
BWC Factor = 0.101035 dB
Location: 4, 2, 363.7 mm

Point scan/x (longitudinal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.100005 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 24.1 dB
ABM1 comp = -8.13 dB A/m
BWC Factor = 0.100005 dB
Location: 4, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM850 CH251_Open Y transversal

DUT: 821901

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.2 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/y (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.101035 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

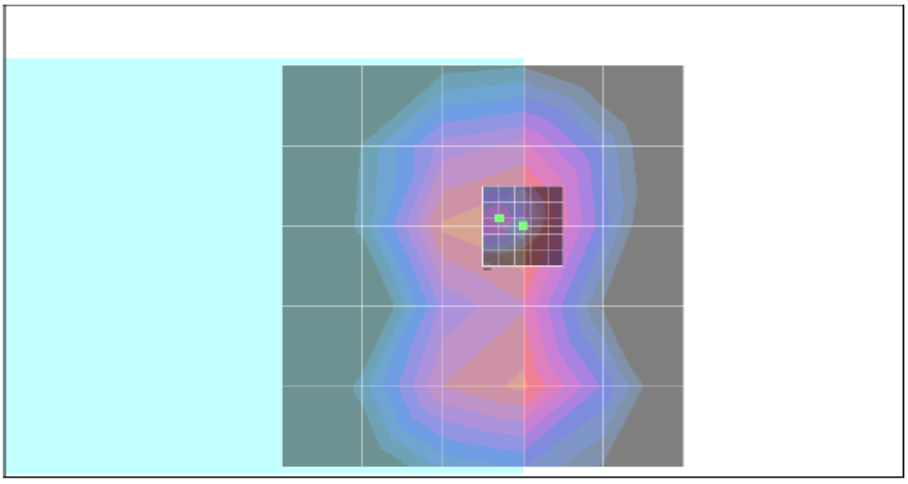
Cursor:
ABM1 comp = -10.6 dB A/m
BWC Factor = 0.101035 dB
Location: -5, -5, 363.7 mm

Fine scan/y (transversal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.101035 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.50 dB A/m
BWC Factor = 0.101035 dB
Location: -2, -6, 363.7 mm

Point scan/y (transversal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.100005 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 25.7 dB
ABM1 comp = -8.27 dB A/m
BWC Factor = 0.100005 dB
Location: -2, -6, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM850 CH251_Open Z Axial

DUT: 821901

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.3 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/z (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.101035 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -3.75 dB A/m
BWC Factor = 0.101035 dB
Location: -5, 5, 363.7 mm

Fine scan/z (axial) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.101035 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

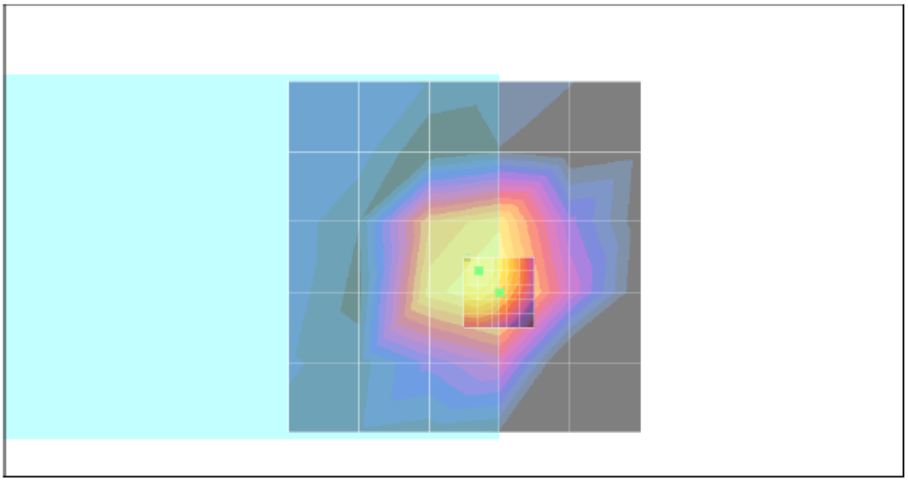
Cursor:
ABM1 comp = -0.919 dB A/m
BWC Factor = 0.101035 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.100005 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 28.9 dB
ABM1 comp = -2.69 dB A/m
BWC Factor = 0.100005 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav
Output Gain: 70.29
Measure Window Start: 2000ms
Measure Window Length: 2000ms
BWC applied: 10.8 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
Diff = 1.10 dB
BWC Factor = 10.8 dB
Location: -2, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH512_Close X longitudinal

DUT: 821901

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.4 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/x (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.134967 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

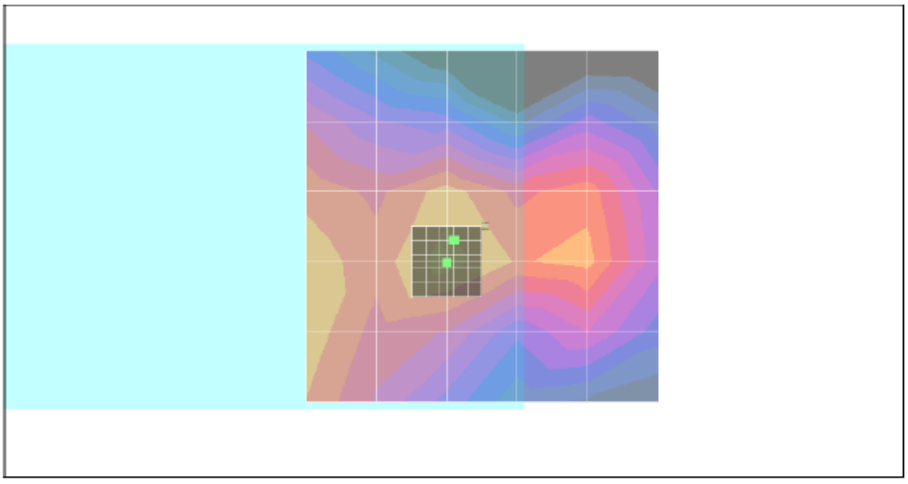
Cursor:
ABM1 comp = -10.4 dB A/m
BWC Factor = 0.134967 dB
Location: 5, 5, 363.7 mm

Fine scan/x (longitudinal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.144967 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.47 dB A/m
BWC Factor = 0.144967 dB
Location: 4, 2, 363.7 mm

Point scan/x (longitudinal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.157003 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 11.2 dB
ABM1 comp = -8.69 dB A/m
BWC Factor = 0.157003 dB
Location: 4, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH512_Close Y transversal

DUT: 821901

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.3 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/y (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.134967 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

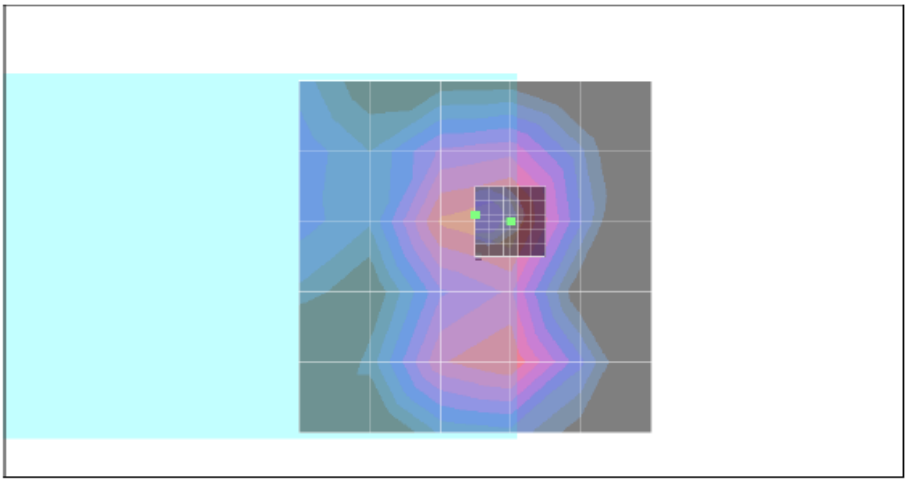
Cursor:
ABM1 comp = -10.7 dB A/m
BWC Factor = 0.134967 dB
Location: -5, -5, 363.7 mm

Fine scan/y (transversal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.144967 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.54 dB A/m
BWC Factor = 0.144967 dB
Location: 0, -6, 363.7 mm

Point scan/y (transversal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.157003 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 16.8 dB
ABM1 comp = -8.38 dB A/m
BWC Factor = 0.157003 dB
Location: 0, -6, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH512_Close Z Axial

DUT: 821901

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.3 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/z (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.134967 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -3.65 dB A/m
BWC Factor = 0.134967 dB
Location: -5, 5, 363.7 mm

Fine scan/z (axial) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.144967 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

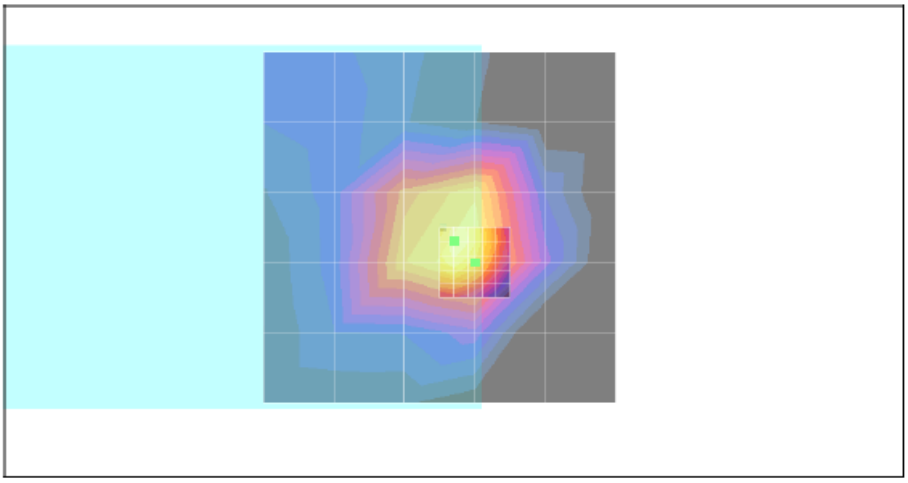
Cursor:
ABM1 comp = -0.510 dB A/m
BWC Factor = 0.144967 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.157003 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 20.6 dB
ABM1 comp = -2.57 dB A/m
BWC Factor = 0.157003 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav
Output Gain: 70.29
Measure Window Start: 2000ms
Measure Window Length: 2000ms
BWC applied: 10.8 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
Diff = 0.979 dB
BWC Factor = 10.8 dB
Location: -2, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH661_Close X longitudinal

DUT: 821901

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.2 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/x (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.125041 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

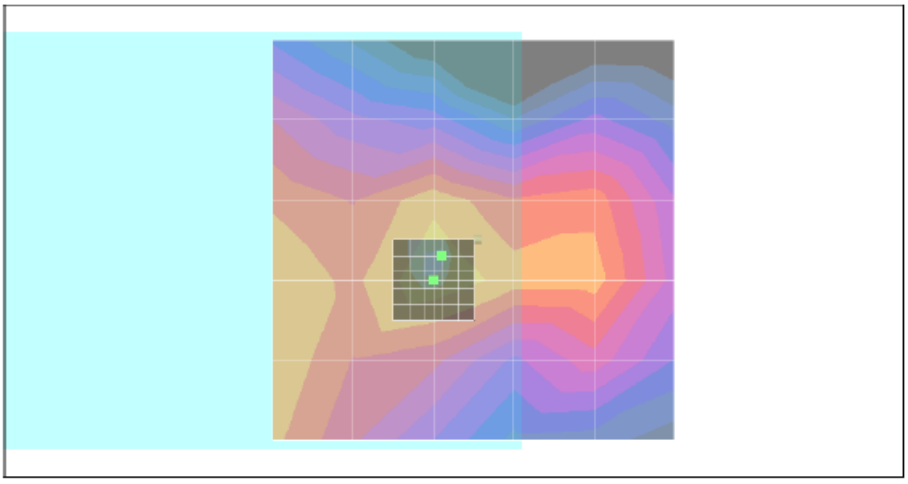
Cursor:
ABM1 comp = -9.89 dB A/m
BWC Factor = 0.125041 dB
Location: 5, 5, 363.7 mm

Fine scan/x (longitudinal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.116989 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.12 dB A/m
BWC Factor = 0.116989 dB
Location: 4, 2, 363.7 mm

Point scan/x (longitudinal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.107043 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 11.1 dB
ABM1 comp = -8.85 dB A/m
BWC Factor = 0.107043 dB
Location: 4, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH661_Close Y transversal

DUT: 821901

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.3 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/y (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.125041 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

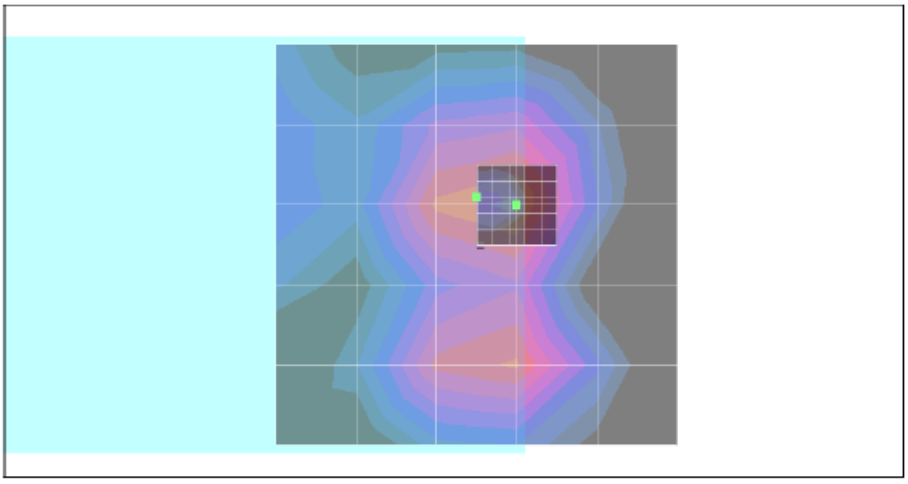
Cursor:
ABM1 comp = -10.4 dB A/m
BWC Factor = 0.125041 dB
Location: -5, -5, 363.7 mm

Fine scan/y (transversal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.116989 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.29 dB A/m
BWC Factor = 0.116989 dB
Location: 0, -6, 363.7 mm

Point scan/y (transversal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.107043 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 16.4 dB
ABM1 comp = -8.66 dB A/m
BWC Factor = 0.107043 dB
Location: 0, -6, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH661_Close Z Axial

DUT: 821901

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.2 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/z (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.125041 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -3.37 dB A/m
BWC Factor = 0.125041 dB
Location: -5, 5, 363.7 mm

Fine scan/z (axial) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.116989 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

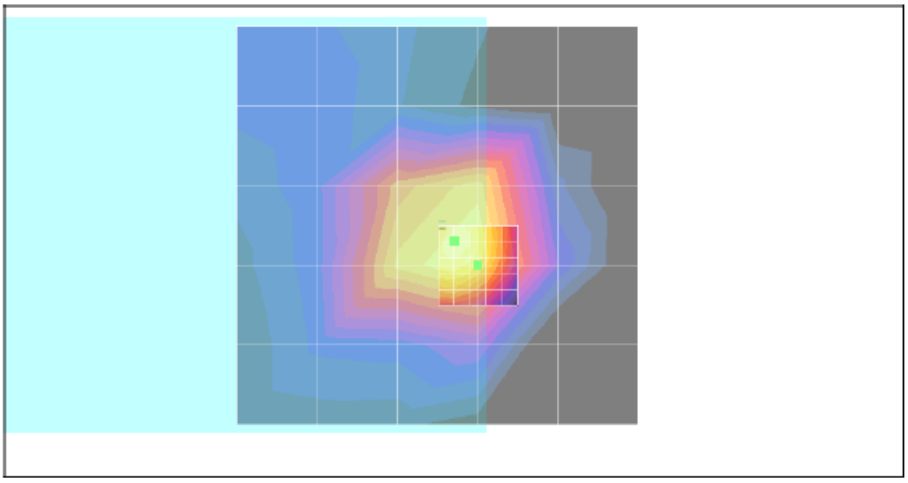
Cursor:
ABM1 comp = -0.149 dB A/m
BWC Factor = 0.116989 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.107043 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 20.6 dB
ABM1 comp = -2.34 dB A/m
BWC Factor = 0.107043 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav
Output Gain: 70.29
Measure Window Start: 2000ms
Measure Window Length: 2000ms
BWC applied: 10.8 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
Diff = 1.02 dB
BWC Factor = 10.8 dB
Location: -2, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH810_Close X longitudinal

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.2 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/x (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.131032 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

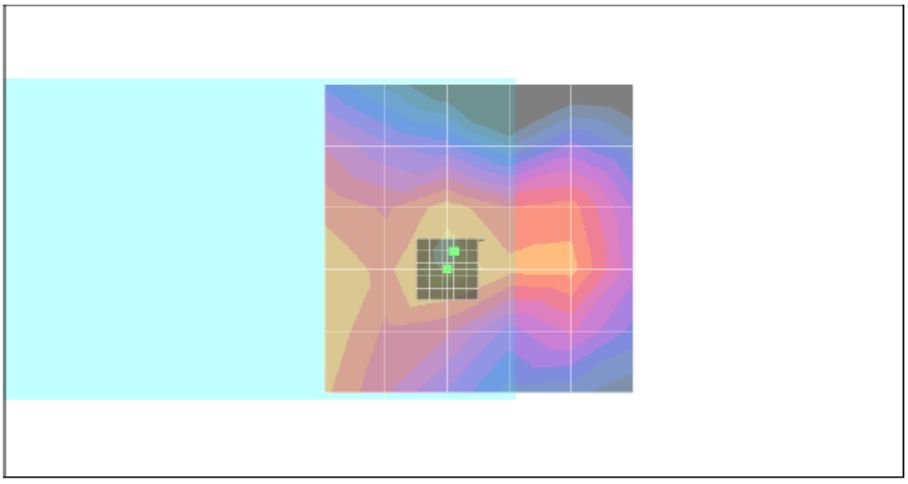
Cursor:
ABM1 comp = -9.75 dB A/m
BWC Factor = 0.131032 dB
Location: 5, 5, 363.7 mm

Fine scan/x (longitudinal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.128037 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.23 dB A/m
BWC Factor = 0.128037 dB
Location: 4, 2, 363.7 mm

Point scan/x (longitudinal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.128037 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 11.5 dB
ABM1 comp = -8.51 dB A/m
BWC Factor = 0.128037 dB
Location: 4, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/30

T-Coil_GSM1900 CH810_Close Y transversal

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.3 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/y (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.131032 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

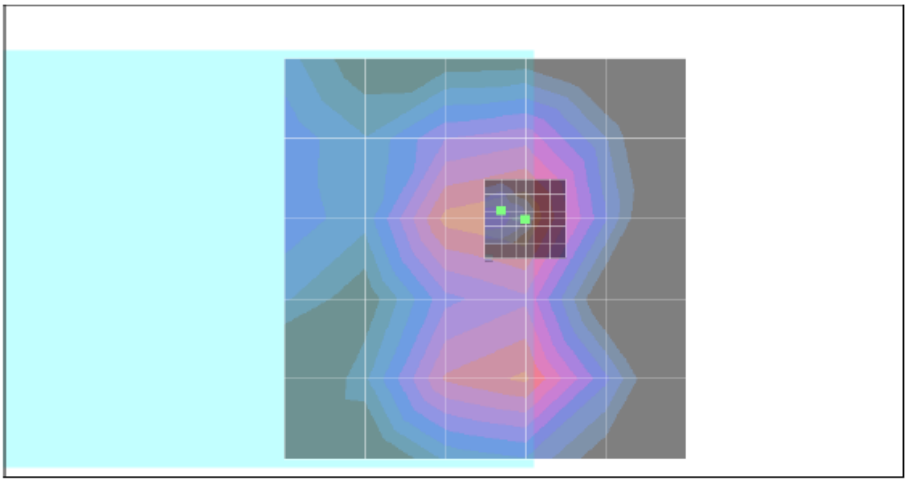
Cursor:
ABM1 comp = -10.7 dB A/m
BWC Factor = 0.131032 dB
Location: -5, -5, 363.7 mm

Fine scan/y (transversal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.128037 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.37 dB A/m
BWC Factor = 0.128037 dB
Location: -2, -6, 363.7 mm

Point scan/y (transversal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.128037 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 17.1 dB
ABM1 comp = -8.65 dB A/m
BWC Factor = 0.128037 dB
Location: -2, -6, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH810_Close Z Axial

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.2 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/z (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.131032 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -3.26 dB A/m
BWC Factor = 0.131032 dB
Location: -5, 5, 363.7 mm

Fine scan/z (axial) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.128037 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

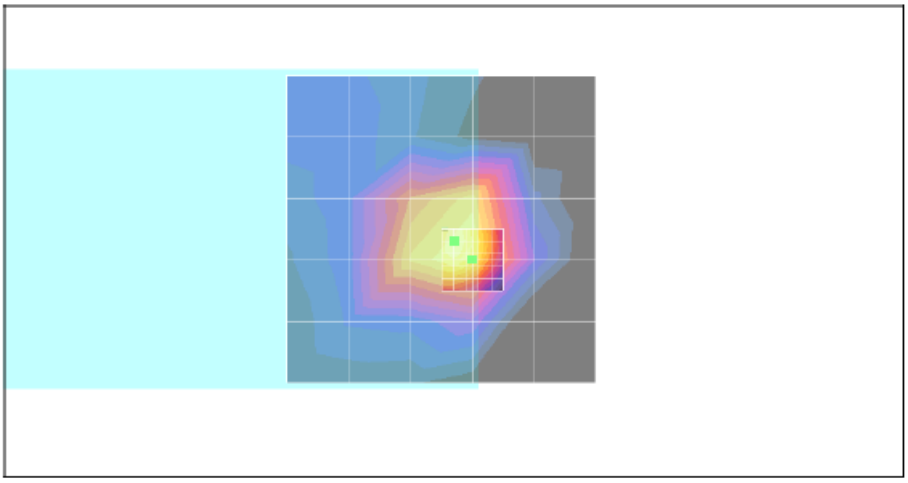
Cursor:
ABM1 comp = 0.103 dB A/m
BWC Factor = 0.128037 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.128037 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 21.0 dB
ABM1 comp = -1.98 dB A/m
BWC Factor = 0.128037 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav
Output Gain: 70.29
Measure Window Start: 2000ms
Measure Window Length: 2000ms
BWC applied: 10.8 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
Diff = 1.13 dB
BWC Factor = 10.8 dB
Location: -2, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH512_Open X longitudinal

DUT: 821901

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.1 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/x (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.148042 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

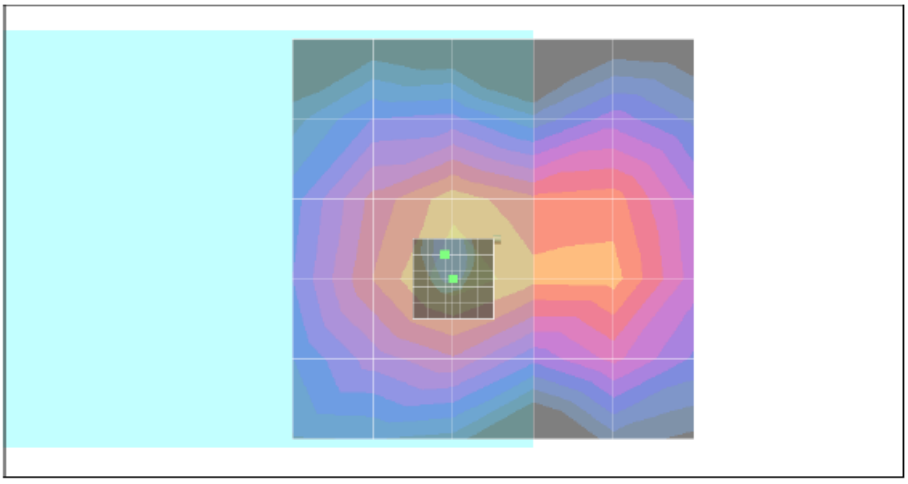
Cursor:
ABM1 comp = -10.1 dB A/m
BWC Factor = 0.148042 dB
Location: 5, 5, 363.7 mm

Fine scan/x (longitudinal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.15103 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.39 dB A/m
BWC Factor = 0.15103 dB
Location: 6, 2, 363.7 mm

Point scan/x (longitudinal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.15103 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 25.1 dB
ABM1 comp = -8.87 dB A/m
BWC Factor = 0.15103 dB
Location: 6, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH512_Open Y transversal

DUT: 821901

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.2 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/y (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.148042 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

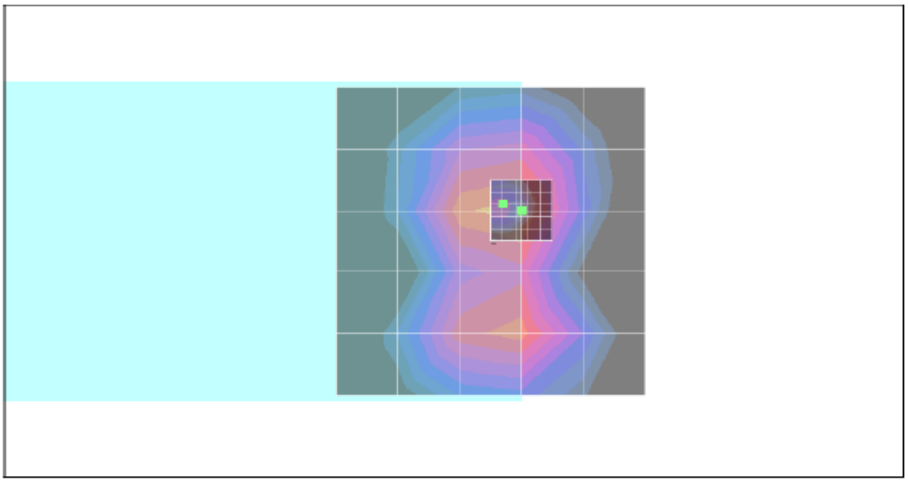
Cursor:
ABM1 comp = -10.8 dB A/m
BWC Factor = 0.148042 dB
Location: -5, -5, 363.7 mm

Fine scan/y (transversal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.15103 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.27 dB A/m
BWC Factor = 0.15103 dB
Location: -2, -6, 363.7 mm

Point scan/y (transversal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.15103 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 26.9 dB
ABM1 comp = -8.86 dB A/m
BWC Factor = 0.15103 dB
Location: -2, -6, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH512_Open Z Axial

DUT: 821901

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.5 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/z (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.148042 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -3.94 dB A/m
BWC Factor = 0.148042 dB
Location: -5, 5, 363.7 mm

Fine scan/z (axial) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.15103 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

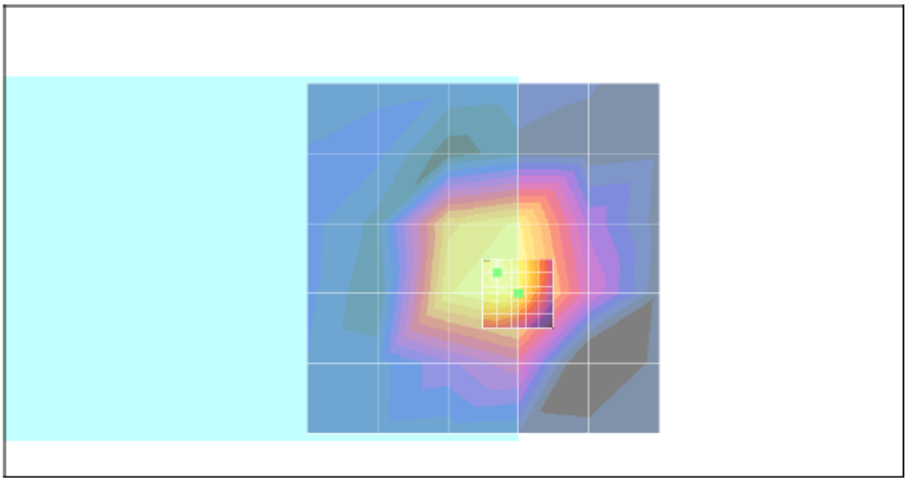
Cursor:
ABM1 comp = -0.234 dB A/m
BWC Factor = 0.15103 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.15103 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 31.3 dB
ABM1 comp = -2.13 dB A/m
BWC Factor = 0.15103 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav
Output Gain: 70.29
Measure Window Start: 2000ms
Measure Window Length: 2000ms
BWC applied: 10.8 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
Diff = 1.16 dB
BWC Factor = 10.8 dB
Location: -2, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH661_Open X longitudinal

DUT: 821901

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.4 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/x (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.103009 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

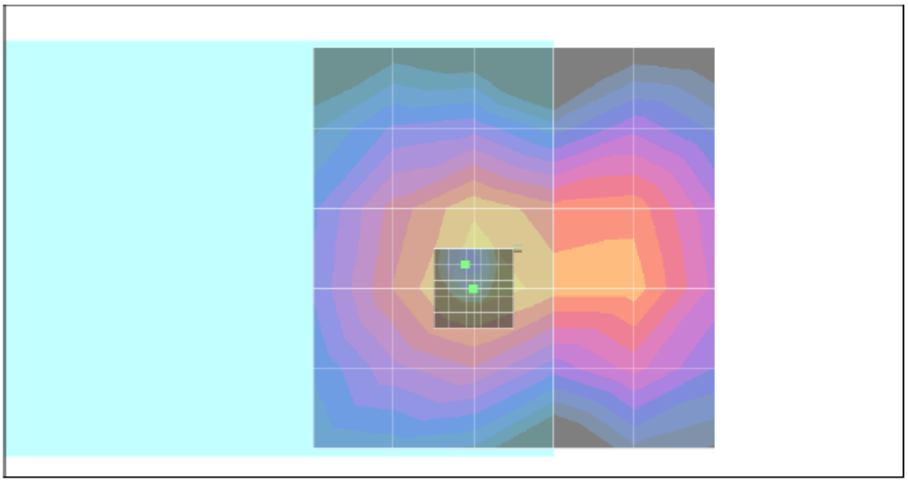
Cursor:
ABM1 comp = -10.0 dB A/m
BWC Factor = 0.103009 dB
Location: 5, 5, 363.7 mm

Fine scan/x (longitudinal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.100005 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.36 dB A/m
BWC Factor = 0.100005 dB
Location: 6, 2, 363.7 mm

Point scan/x (longitudinal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.101979 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 25.4 dB
ABM1 comp = -8.53 dB A/m
BWC Factor = 0.101979 dB
Location: 6, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH661_Open Y transversal

DUT: 821901

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.3 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/y (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.103009 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

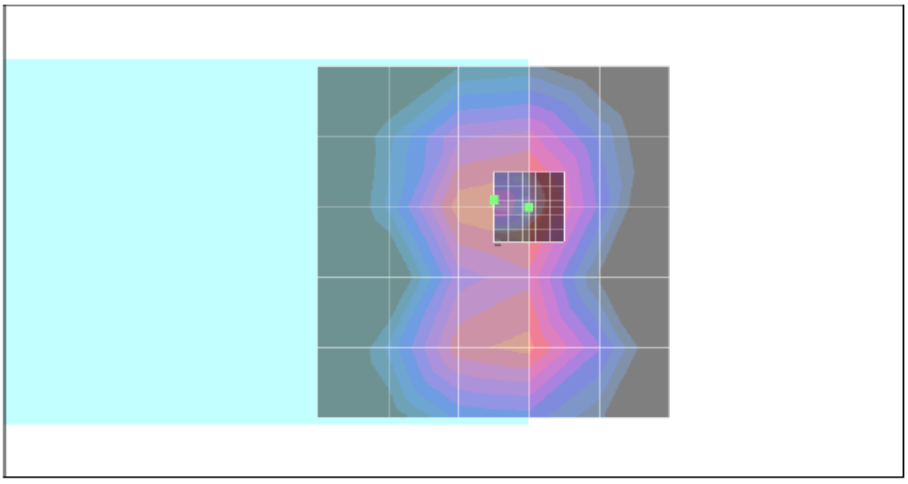
Cursor:
ABM1 comp = -10.9 dB A/m
BWC Factor = 0.103009 dB
Location: -5, -5, 363.7 mm

Fine scan/y (transversal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.100005 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.28 dB A/m
BWC Factor = 0.100005 dB
Location: 0, -6, 363.7 mm

Point scan/y (transversal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.101979 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 26.9 dB
ABM1 comp = -8.41 dB A/m
BWC Factor = 0.101979 dB
Location: 0, -6, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH661_Open Z Axial

DUT: 821901

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.2 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/z (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.103009 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -3.89 dB A/m
BWC Factor = 0.103009 dB
Location: -5, 5, 363.7 mm

Fine scan/z (axial) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.100005 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

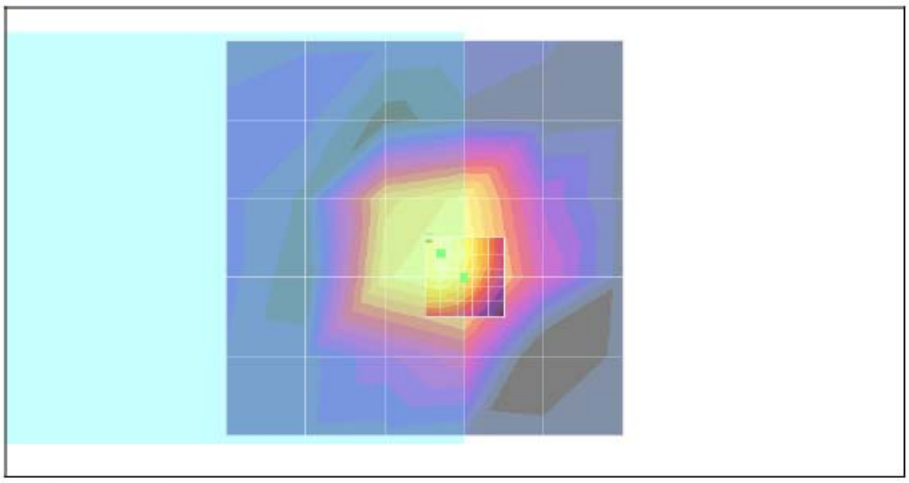
Cursor:
ABM1 comp = -0.230 dB A/m
BWC Factor = 0.100005 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.101979 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 31.1 dB
ABM1 comp = -2.43 dB A/m
BWC Factor = 0.101979 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav
Output Gain: 70.29
Measure Window Start: 2000ms
Measure Window Length: 2000ms
BWC applied: 10.8 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
Diff = 1.23 dB
BWC Factor = 10.8 dB
Location: -2, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH810_Open X longitudinal

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.2 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/x (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.144967 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

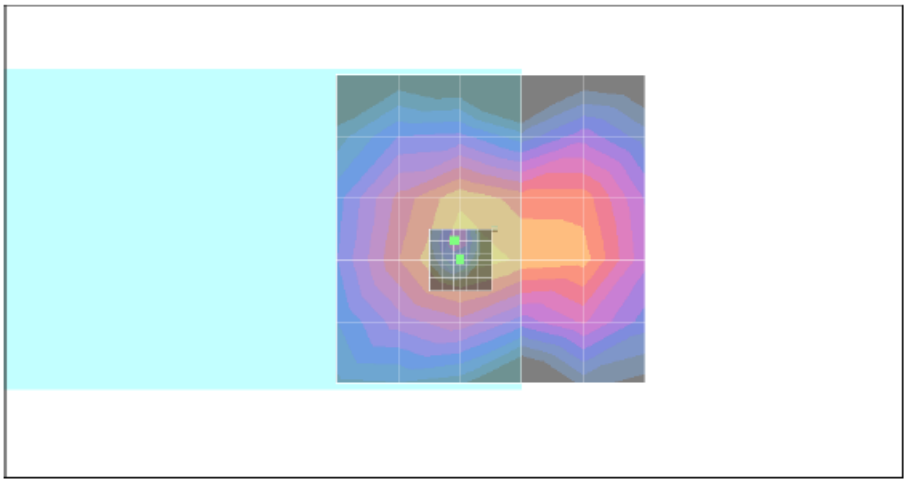
Cursor:
ABM1 comp = -9.90 dB A/m
BWC Factor = 0.144967 dB
Location: 5, 5, 363.7 mm

Fine scan/x (longitudinal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.141037 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.03 dB A/m
BWC Factor = 0.141037 dB
Location: 6, 2, 363.7 mm

Point scan/x (longitudinal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.131973 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 25.9 dB
ABM1 comp = -8.17 dB A/m
BWC Factor = 0.131973 dB
Location: 6, 2, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH810_Open Y transversal

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.6 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/y (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.144967 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

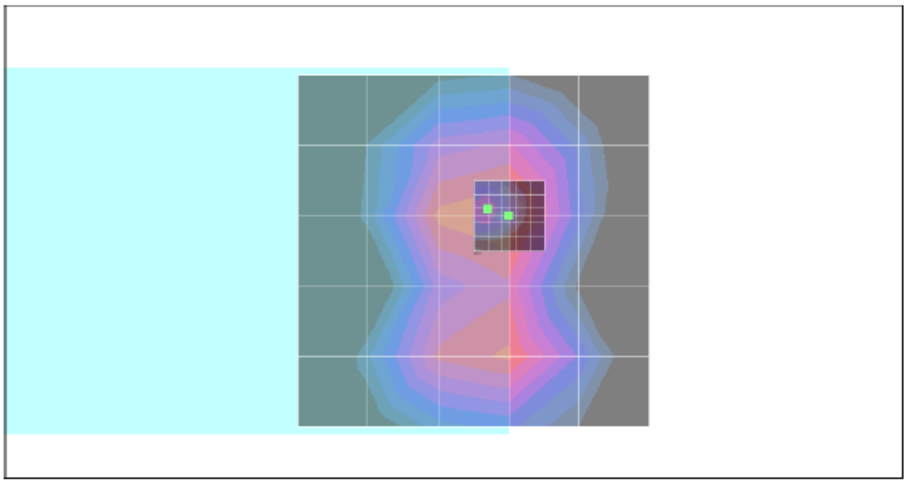
Cursor:
ABM1 comp = -10.9 dB A/m
BWC Factor = 0.144967 dB
Location: -5, -5, 363.7 mm

Fine scan/y (transversal) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.141037 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -9.45 dB A/m
BWC Factor = 0.141037 dB
Location: -2, -6, 363.7 mm

Point scan/y (transversal) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.131973 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 26.6 dB
ABM1 comp = -9.13 dB A/m
BWC Factor = 0.131973 dB
Location: -2, -6, 363.7 mm



0 dB = 1.00A/m

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date:2008/3/20

T-Coil_GSM1900 CH810_Open Z Axial

DUT: 821901

Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\varepsilon_r = 1$; $\rho = 1$ kg/m^3
Ambient Temperature : 22.2 ℃

DASY4 Configuration:
- Probe: AM1DV2 - 1038; ; Calibrated: 2008/1/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn778; Calibrated: 2007/9/17
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA; Serial: 100x
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Coarse Scans/z (axial) scan 50 x 50 (grid 10) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.144967 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1 comp = -4.44 dB A/m
BWC Factor = 0.144967 dB
Location: -5, 5, 363.7 mm

Fine scan/z (axial) scan 10 x 10 (grid 2) with noise/ABM Signal(x,y,z) (6x6x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.141037 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

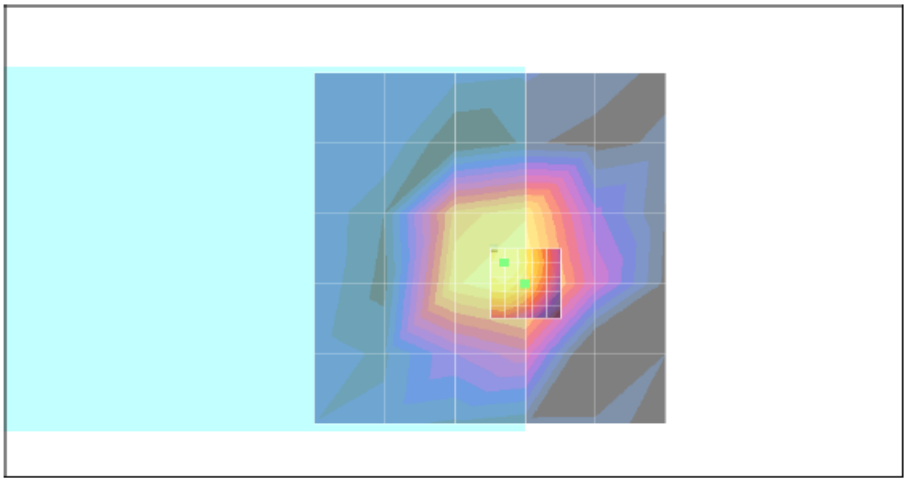
Cursor:
ABM1 comp = -0.765 dB A/m
BWC Factor = 0.141037 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) scan at point with noise/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 35.891
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.131973 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
ABM1/ABM2 = 30.7 dB
ABM1 comp = -2.77 dB A/m
BWC Factor = 0.131973 dB
Location: -2, 2, 363.7 mm

Point scan/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav
Output Gain: 70.29
Measure Window Start: 2000ms
Measure Window Length: 2000ms
BWC applied: 10.8 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:
Diff = 0.908 dB
BWC Factor = 10.8 dB
Location: -2, 2, 363.7 mm



0 dB = 1.00A/m

Appendix B – Calibration Data

Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland
Phone +41 44 245 9700, Fax +41 44 245 9779
info@speag.com, http://www.speag.com

Client Sporton (Auden)

Certificate of test and configuration

Item	**AM1DV2** Audio Magnetic 1D Field Probe
Type No	SP AM1 001 AF
Series No	**1038**
Manufacturer / Origin	Schmid & Partner Engineering AG, Zürich, Switzerland

Description of the item
The Audio Magnetic Field Probe is a fully shielded magnetic field probe for the frequency range from 100 Hz to 20 kHz. The pickup coil is compliant with the dimensional requirements of [1]. The probe includes a symmetric 40dB low noise amplifier for the signal available at the shielded 3 pin connector at the side. Power is supplied via the same connector (phantom power supply) and monitored via the LED near the connector. The 7 pin connector at the end of the probe does not carry any signals, but determines the angle of the sensor when mounted on the DAE. The probe supports mechanical detection of the surface. The single sensor in the probe is arranged in a tilt angle allowing measurement of 3 orthogonal field components when rotating the probe by 120° around its axis. It is aligned with the perpendicular component of the field, if the probe axis is tilted 35.3° above the measurement plane, using the connector rotation and Sensor angle stated below.
The probe is fully RF shielded when operated with the matching signal cable (shielded) and allows measurement of audio magnetic fields in the close vicinity of RF emitting wireless devices according to [1] without additional shielding.

Handling of the item
The probe is manufactured from stainless steel. In order to maintain the performance and calibration of the probe, it must not be opened. The probe is designed for operation in air and shall not be exposed to humidity or liquids. For proper operation of the surface detection and emergency stop functions in the DASY system, the probe must be operated with the special probe cup provided (larger diameter). Verify that the probe can slide in the probe cup rubber smoothly.

Functional test, configuration data and sensitivity
The probe configuration data were evaluated after a functional test including noise level and RF immunity. Connector rotation, sensor angle and sensitivity are specific for this probe.

DASY configuration data for the probe

Configuration item	Condition	Configuration Data	Dimension
Overall length	mounted on DAE in DASY system	296	mm
Tip diameter	at the cylindrical part	6	mm
Sensor offset	center of sensor, from tip	3	mm
Connector rotation	Evaluated in homogeneous 1 kHz magnetic field generated with AMCC Helmholtz Calibration Coil	**39.8**	°
Sensor angle		**3.09**	°
Sensitivity	at 1 kHz	**0.0666**	V / (A/m)

Standards
[1] ANSI-C63.19-2007

Test date 23.1.2008 MM

Issue date 25.1.2008

Signature M. Meili

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Certificate of conformity

Item	Audio Magnetic Calibration Coil AMCC
Type No	**SD HAC P02 A**
Series No	1001 ff.
Manufacturer / Origin	Schmid & Partner Engineering AG Zurich, Switzerland

Description of the item
The Audio Magnetic Calibration coil (AMCC) is a Helmholtz Coil designed according to standard [1], section D.9 for calibration of the AM1D probe. Two horizontal coils are positioned above a non-metallic base plate and generate a homogeneous magnetic field in the z direction (normal to it).

Configuration
The AMCC consists of two parallel coils of 20 turns with radius 143 mm connected in parallel in a distance of 143 mm. With this design, a current of 10 mA produces a field of 1 A/m.
The DC input resistance at the input BNC socket is adjusted by a series resistor to a DC resistance of approximately 50 Ohm. The voltage required to produce a field of 1 A/m is consequently approx. 500 mV.
To current through the coil is monitored via a shunt resistor of 10 Ohm +/- 1%. The voltage is available on a BNO socket with 100 mV corresponding to 1 A/m.

Handling of the item
The coil shall be positioned in a non-metallic environment to avoid distortion of the magnetic field.

Tests

Test	Requirement	Details	Units tested
Number of turns	N = 20 per coil	Resistance measurment	all
Orientation of coils	parallel coils with same direction of windings	Magnetic field variation in the AMCC axis	all
Coil radius	r = 143 mm	mechanical dimension	First article
Coil distance	d = 143 mm distance between coil centers	mechanical dimension	First article
Input resistance	51.7 +/- 2 Ohm	DC resistance at BNC input connector	all
Shunt resistance	R = 10.0 Ohm +/- 1 %	DC resistance at BNO output connector	all
Shunt sensitivity	Hc = 1 A/m per 100 mV according to formula Hc = (U / R) * N / r / (1.25^1.5)	Field measurement compared with Narda ELT400 + BN2300/90.10	First article

Standards
[1] ANSI PC63.19-2006 Draft 3.12

Conformity
Based on the tests above, we certify that this item is in compliance with the requirements of [1].

Date 22.5.2006

Stamp / Signature

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