

**Appendix A – HAC Measurement Data**

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA850 Ch1013_RCI SO3_Voice_X longitudinal**DUT: 820515**

Communication System: CDMA ; Frequency: 824.7 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 1.81 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 4.94 dB A/m

BWC Factor = 0.151969 dB

Location: 8, 0, 363.7 mm

Point scan/x (longitudinal) scan at point with noise/ABM Signal(x,y,z) (1x1x1):

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

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 3.56 dB A/m

BWC Factor = 0.151969 dB

Location: 8, 0, 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

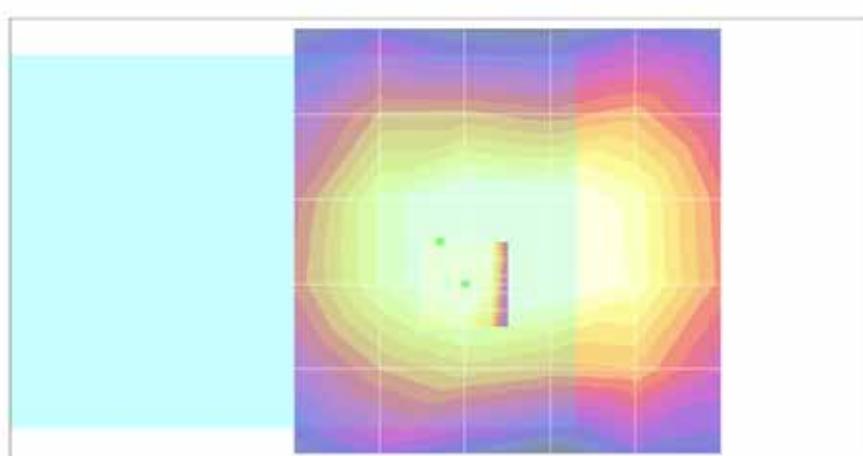
Cursor:

ABM1/ABM2 = 42.5 dB

ABM1 comp = 3.56 dB A/m

BWC Factor = 0.151969 dB

Location: 8, 0, 363.7 mm





FCC HAC T-coil Test Report

Test Report No : HA820515-B

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA850 Ch1013_RC1 SO3_Voice_Y transversal

DUT: 820515

Communication System: CDMA ; Frequency: 824.7 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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 Scan/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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 0.517 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 3.73 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

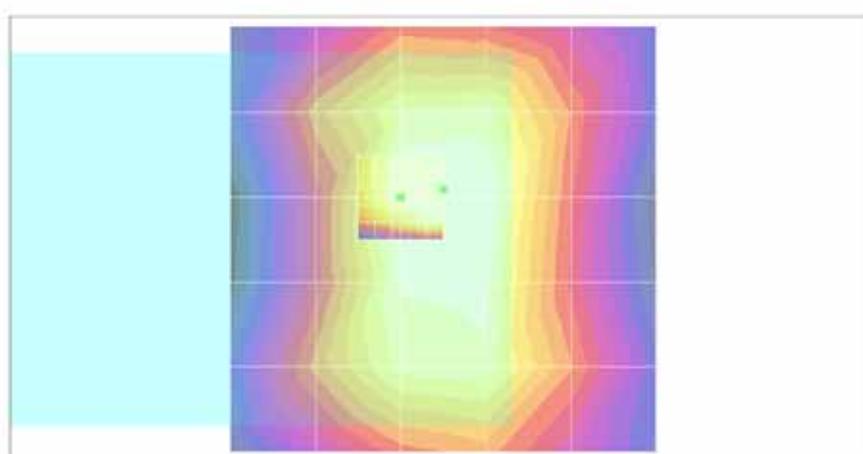
Cursor:

ABM1/ABM2 = 43.3 dB

ABM1 comp = 3.49 dB A/m

BWC Factor = 0.151969 dB

Location: 0, -6, 363.7 mm



0 dB = 1.00A/m



FCC HAC T-coil Test Report

Test Report No : HA820515-B

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

T-Coil_CDMA850 Ch1013_RC1 SO3_Voice_Z Axial

DUT: 820515

Communication System: CDMA ; Frequency: 824.7 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 7.38 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 12.5 dB A/m

BWC Factor = 0.151969 dB

Location: 0, 2, 363.7 mm



FCC HAC T-coil Test Report

Test Report No : HA820515-B

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: 27.998
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.151969 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

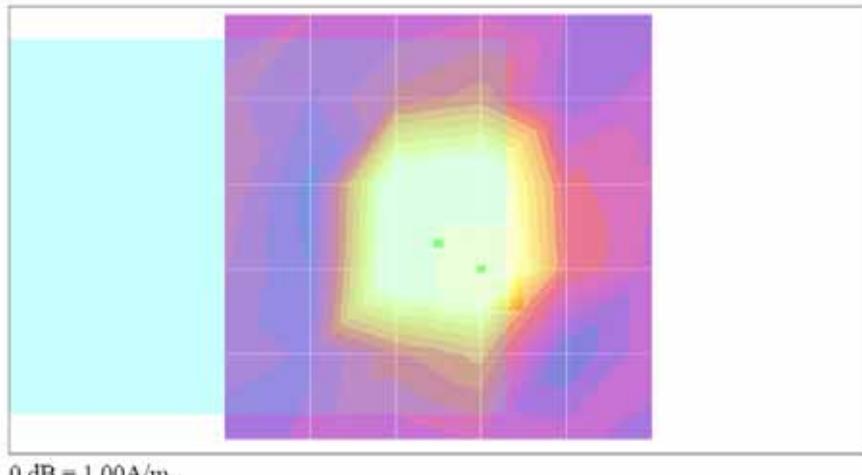
ABM1/ABM2 = 45.8 dB
ABM1 comp = 11.6 dB A/m
BWC Factor = 0.151969 dB
Location: 0, 2, 363.7 mm

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: 54.833
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 = 1.94 dB
BWC Factor = 10.8 dB
Location: 0, 2, 363.7 mm





Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA850 Ch384_RC1 SO3_Voice_X longitudinal**DUT: 820515**

Communication System: CDMA ; Frequency: 836.52 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 1.55 dB A/m

BWC Factor = 0.151969 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: 27.998

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 = 4.23 dB A/m

BWC Factor = 0.15103 dB

Location: -6, 0, 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

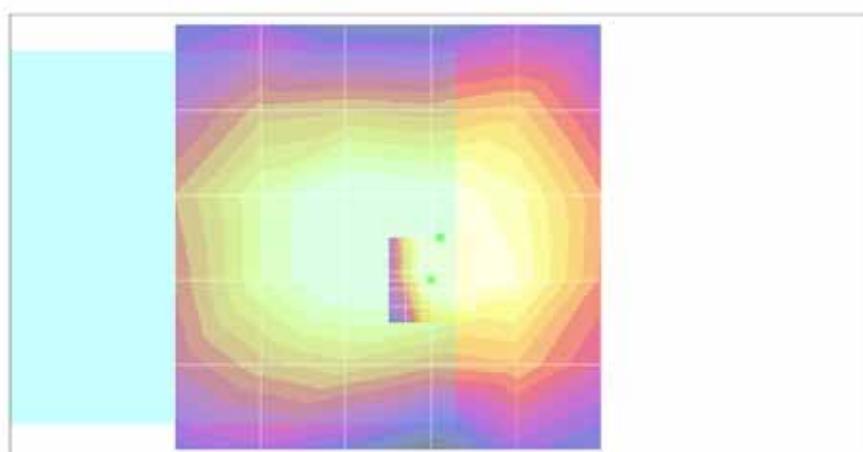
Cursor:

ABM1/ABM2 = 40.6 dB

ABM1 comp = 2.85 dB A/m

BWC Factor = 0.151969 dB

Location: -6, 0, 363.7 mm



0 dB = 1.00A/m



FCC HAC T-coil Test Report

Test Report No : HA820515-B

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA850 Ch384_RC1 SO3_Voice_Y transversal

DUT: 820515

Communication System: CDMA ; Frequency: 836.52 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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 Scan/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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 1.42 dB A/m

BWC Factor = 0.151969 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: 27.998

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 = 3.28 dB A/m

BWC Factor = 0.15103 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

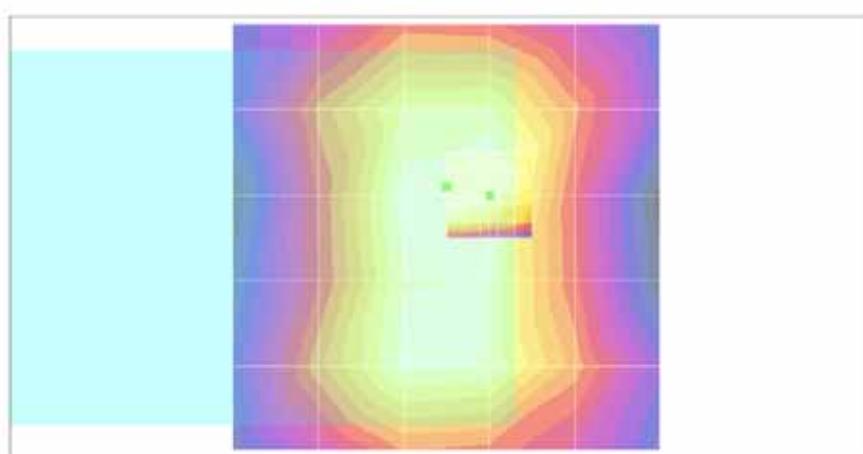
Cursor:

ABM1/ABM2 = 43.5 dB

ABM1 comp = 2.95 dB A/m

BWC Factor = 0.151969 dB

Location: 0, -6, 363.7 mm



0 dB = 1.00A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA850 Ch384_RC1 SO3_Voice_Z Axial**DUT: 820515**

Communication System: CDMA ; Frequency: 836.52 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 6.68 dB A/m

BWC Factor = 0.151969 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: 27.998

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 = 12.7 dB A/m

BWC Factor = 0.15103 dB

Location: 0, 0, 363.7 mm



FCC HAC T-coil Test Report

Test Report No : HA820515-B

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: 27.998
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.151969 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

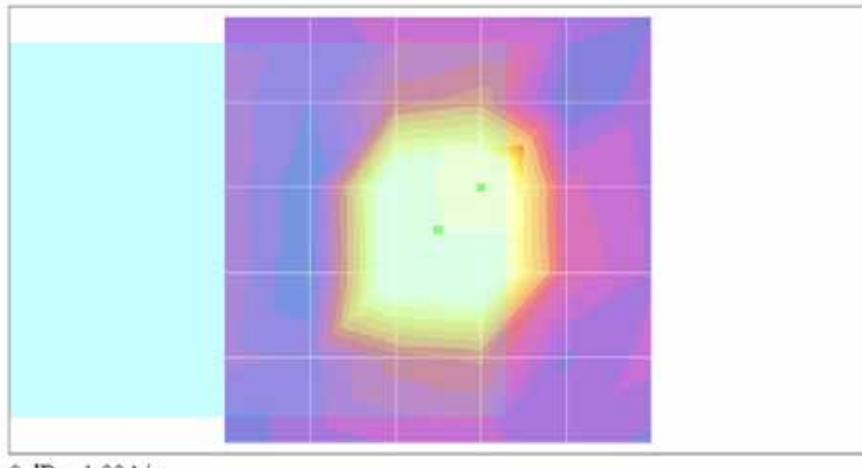
ABM1/ABM2 = 46.0 dB
ABM1 comp = 12.2 dB A/m
BWC Factor = 0.151969 dB
Location: 0, 0, 363.7 mm

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: 54.833
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 = 2.00 dB
BWC Factor = 10.8 dB
Location: 0, 0, 363.7 mm





Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA850 Ch777_RC1 SO3_Voice_X longitudinal**DUT: 820515**

Communication System: CDMA ; Frequency: 848.31 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 1.40 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 5.35 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.152993 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

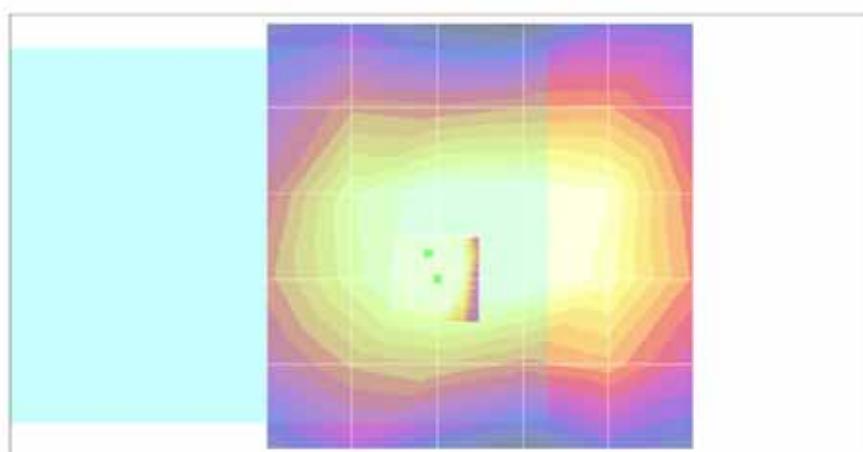
Cursor:

ABM1/ABM2 = 43.8 dB

ABM1 comp = 5.12 dB A/m

BWC Factor = 0.152993 dB

Location: 6, 2, 363.7 mm



0 dB = 1.00A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA850 Ch777_RC1 SO3_Voice_Y transversal**DUT: 820515**

Communication System: CDMA ; Frequency: 848.31 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = -0.365 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 4.32 dB A/m

BWC Factor = 0.151969 dB

Location: 0, -8, 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.152993 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

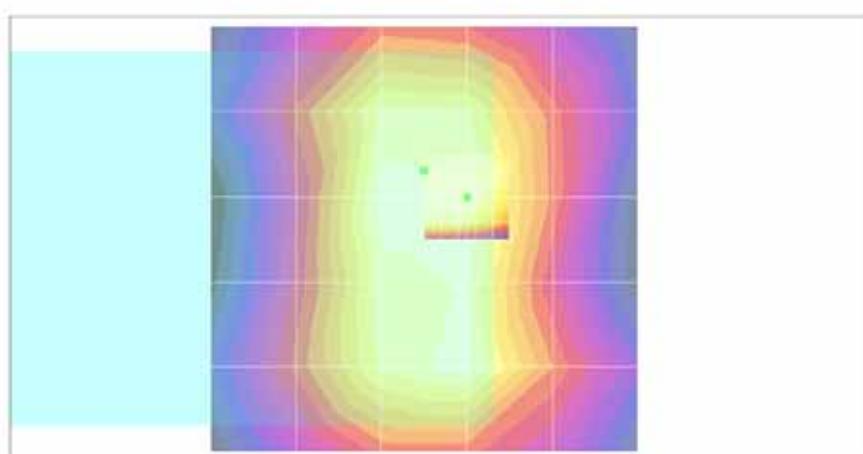
Cursor:

ABM1/ABM2 = 41.7 dB

ABM1 comp = 2.24 dB A/m

BWC Factor = 0.152993 dB

Location: 0, -8, 363.7 mm



0 dB = 1.00A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA850 Ch777_RC1 SO3_Voice_Z Axial**DUT: 820515**

Communication System: CDMA ; Frequency: 848.31 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 5.87 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 12.8 dB A/m

BWC Factor = 0.151969 dB

Location: 0, 0, 363.7 mm



FCC HAC T-coil Test Report

Test Report No : HA820515-B

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: 27.998
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.152993 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

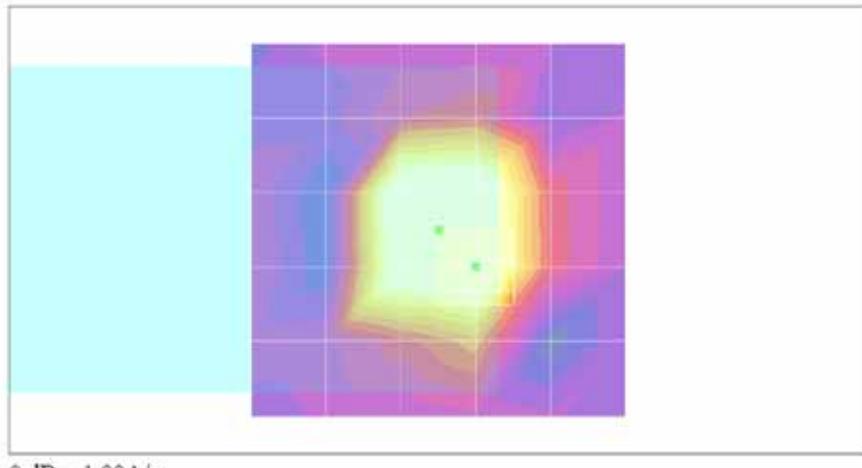
ABM1/ABM2 = 44.5 dB
ABM1 comp = 11.2 dB A/m
BWC Factor = 0.152993 dB
Location: 0, 0, 363.7 mm

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: 54.833
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 = 1.96 dB
BWC Factor = 10.8 dB
Location: 0, 0, 363.7 mm





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

T-Coil_CDMA1700 Ch25_RC1 SO3_Voice_X longitudinal**DUT: 820515**

Communication System: CDMA ; Frequency: 1711.25 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 1.36 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 4.96 dB A/m

BWC Factor = 0.151969 dB

Location: -8, 0, 363.7 mm



FCC HAC T-coil Test Report

Test Report No : HA820515-B

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

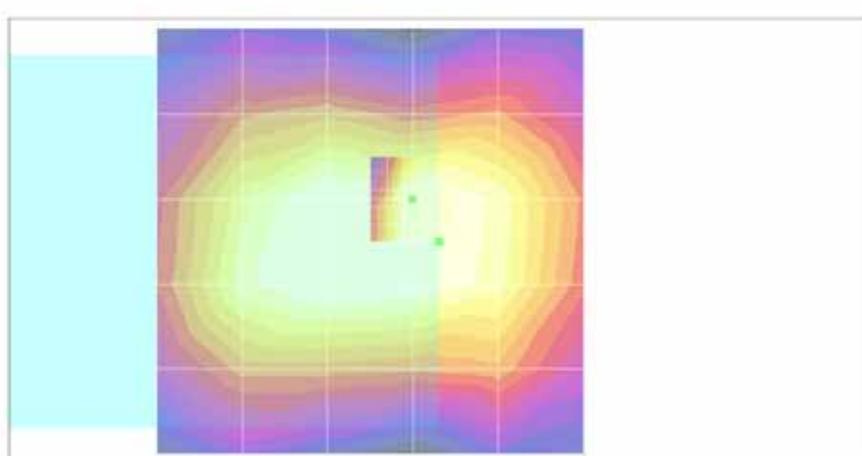
Cursor:

ABM1/ABM2 = 42.3 dB

ABM1 comp = 3.70 dB A/m

BWC Factor = 0.151969 dB

Location: -8, 0, 363.7 mm



0 dB = 1.00A/m



FCC HAC T-coil Test Report

Test Report No : HA820515-B

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA1700 Ch25_RC1 SO3_Voice_Y transversal

DUT: 820515

Communication System: CDMA ; Frequency: 1711.25 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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 Scan/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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 0.375 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 3.82 dB A/m

BWC Factor = 0.151969 dB

Location: 0, -10, 363.7 mm



FCC HAC T-coil Test Report

Test Report No : HA820515-B

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

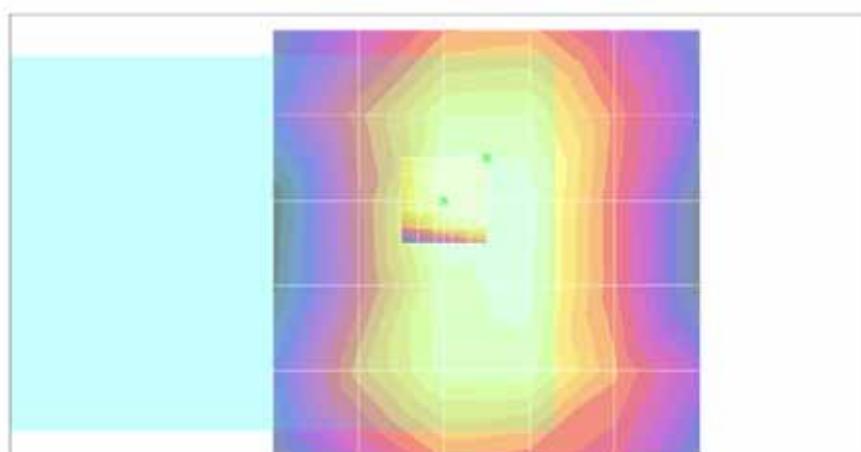
Cursor:

ABM1/ABM2 = 41.9 dB

ABM1 comp = 2.16 dB A/m

BWC Factor = 0.151969 dB

Location: 0, -10, 363.7 mm





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

T-Coil_CDMA1700 Ch25_RC1 SO3_Voice_Z Axial**DUT: 820515**

Communication System: CDMA ; Frequency: 1711.25 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 5.38 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 11.9 dB A/m

BWC Factor = 0.151969 dB

Location: 0, 0, 363.7 mm



FCC HAC T-coil Test Report

Test Report No : HA820515-B

Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.151969 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

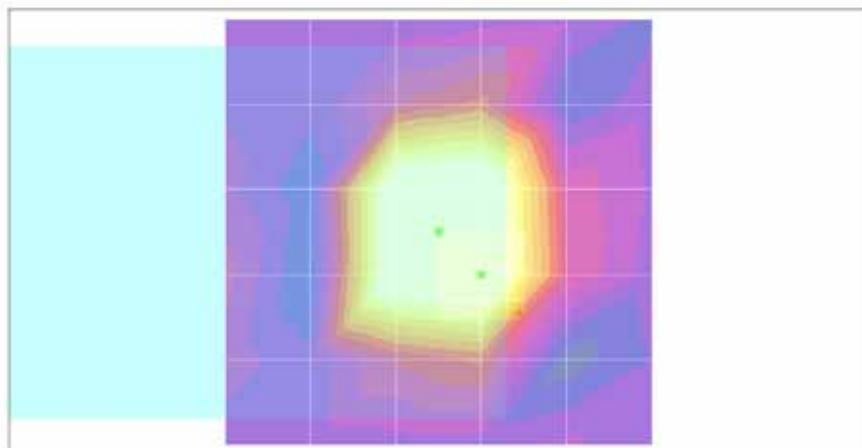
ABM1/ABM2 = 45.0 dB
ABM1 comp = 11.9 dB A/m
BWC Factor = 0.151969 dB
Location: 0, 0, 363.7 mm

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: 54.833
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 = 1.47 dB
BWC Factor = 10.8 dB
Location: 0, 0, 363.7 mm





Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA1700 Ch425_RC1 SO3_Voice_X longitudinal**DUT: 820515**

Communication System: CDMA ; Frequency: 1731.25 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 2.36 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 4.91 dB A/m

BWC Factor = 0.151969 dB

Location: 6, 0, 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

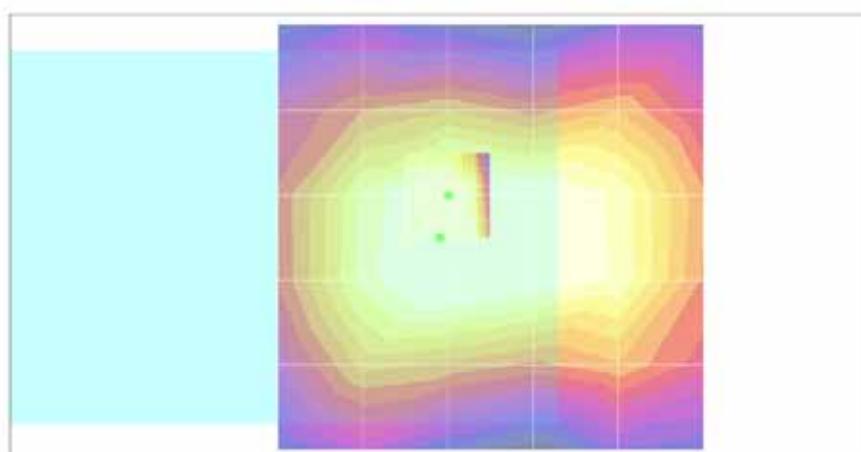
Cursor:

ABM1/ABM2 = 44.3 dB

ABM1 comp = 6.00 dB A/m

BWC Factor = 0.151969 dB

Location: 6, 0, 363.7 mm



0 dB = 1.00A/m



FCC HAC T-coil Test Report

Test Report No : HA820515-B

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

T-Coil_CDMA1700 Ch425_RC1 SO3_Voice_Y transversal

DUT: 820515

Communication System: CDMA ; Frequency: 1731.25 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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 Scan/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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = -0.361 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 3.33 dB A/m

BWC Factor = 0.151969 dB

Location: 2, 10, 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

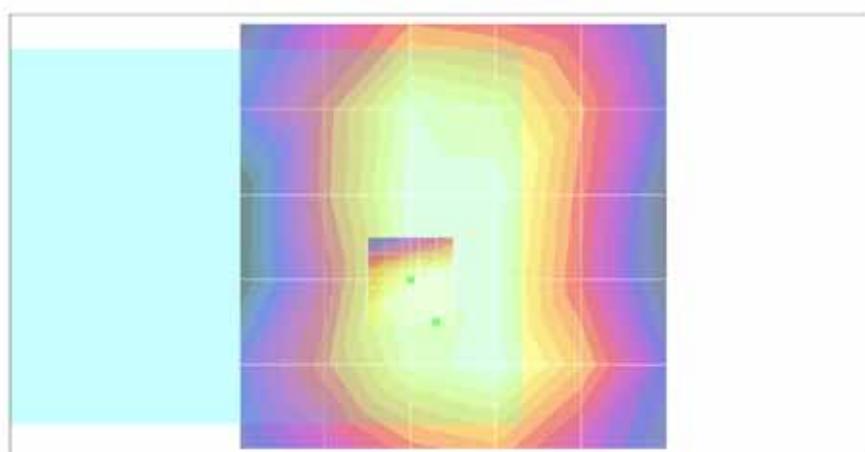
Cursor:

ABM1/ABM2 = 41.4 dB

ABM1 comp = 1.87 dB A/m

BWC Factor = 0.151969 dB

Location: 2, 10, 363.7 mm



0 dB = 1.00A/m



FCC HAC T-coil Test Report

Test Report No : HA820515-B

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date: 2008/3/30

T-Coil_CDMA1700 Ch425_RC1 SO3_Voice_Z Axial

DUT: 820515

Communication System: CDMA ; Frequency: 1731.25 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 5.94 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 12.6 dB A/m

BWC Factor = 0.151969 dB

Location: 0, 2, 363.7 mm



FCC HAC T-coil Test Report

Test Report No : HA820515-B

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: 27.998
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.151969 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

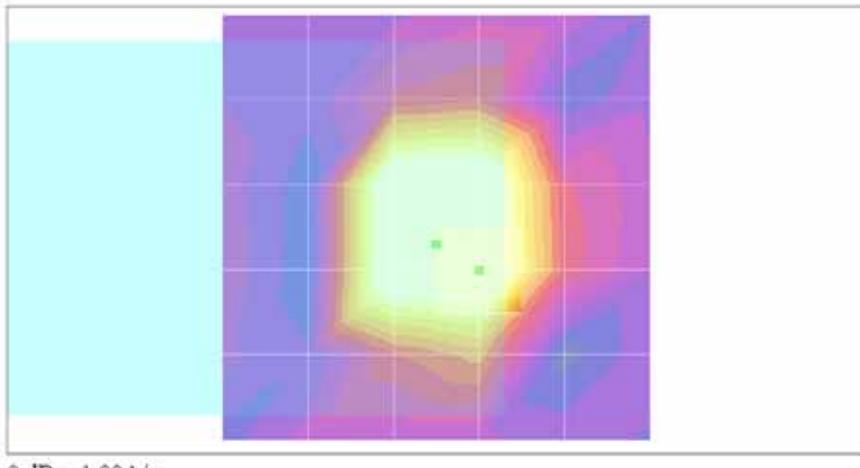
ABM1/ABM2 = 44.3 dB
ABM1 comp = 10.9 dB A/m
BWC Factor = 0.151969 dB
Location: 0, 2, 363.7 mm

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: 54.833
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 = 0.869 dB
BWC Factor = 10.8 dB
Location: 0, 2, 363.7 mm





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

T-Coil_CDMA1700 Ch875_RC1 SO3_Voice_X longitudinal**DUT: 820515**

Communication System: CDMA ; Frequency: 1753.75 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 2.73 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.152993 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 5.39 dB A/m

BWC Factor = 0.152993 dB

Location: 8, 0, 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

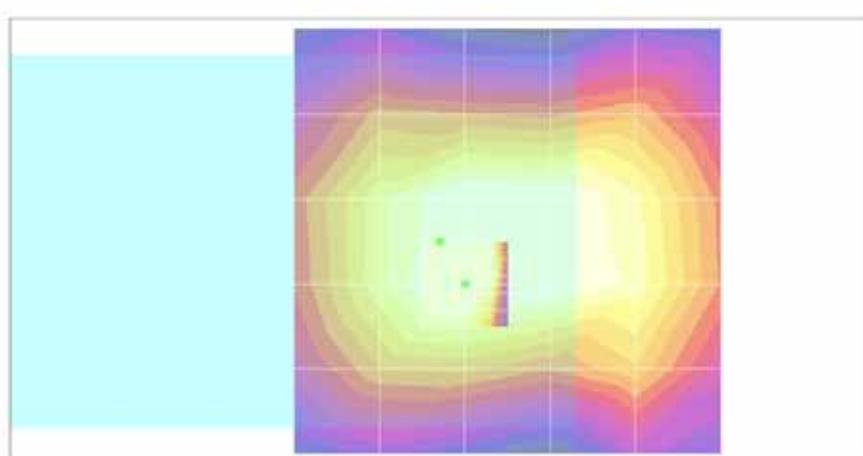
Cursor:

ABM1/ABM2 = 44.7 dB

ABM1 comp = 5.88 dB A/m

BWC Factor = 0.151969 dB

Location: 8, 0, 363.7 mm



0 dB = 1.00A/m



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

T-Coil_CDMA1700 Ch875_RC1 SO3_Voice_Y transversal**DUT: 820515**

Communication System: CDMA ; Frequency: 1753.75 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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 Scan/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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 2.29 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.152993 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 4.48 dB A/m

BWC Factor = 0.152993 dB

Location: 0, -8, 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

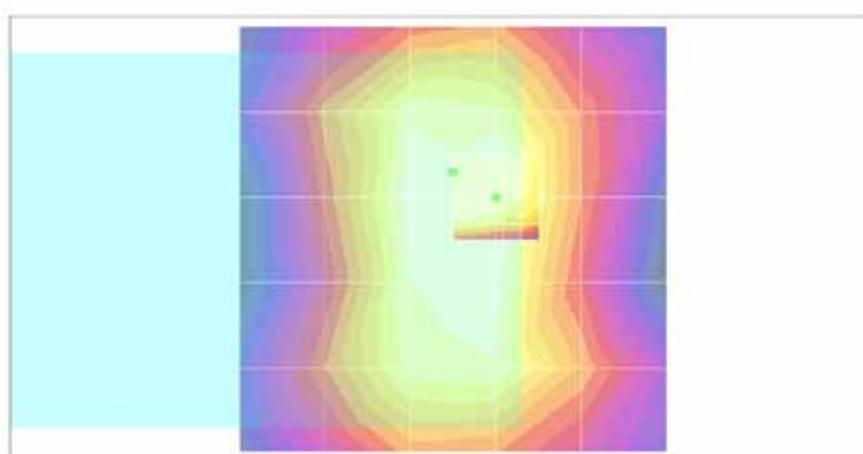
Cursor:

ABM1/ABM2 = 44.4 dB

ABM1 comp = 4.90 dB A/m

BWC Factor = 0.151969 dB

Location: 0, -8, 363.7 mm





Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA1700 Ch875_RC1 SO3_Voice_Z Axial**DUT: 820515**

Communication System: CDMA ; Frequency: 1753.75 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 6.86 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.152993 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 11.6 dB A/m

BWC Factor = 0.152993 dB

Location: -2, 0, 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: 27.998
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.151969 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

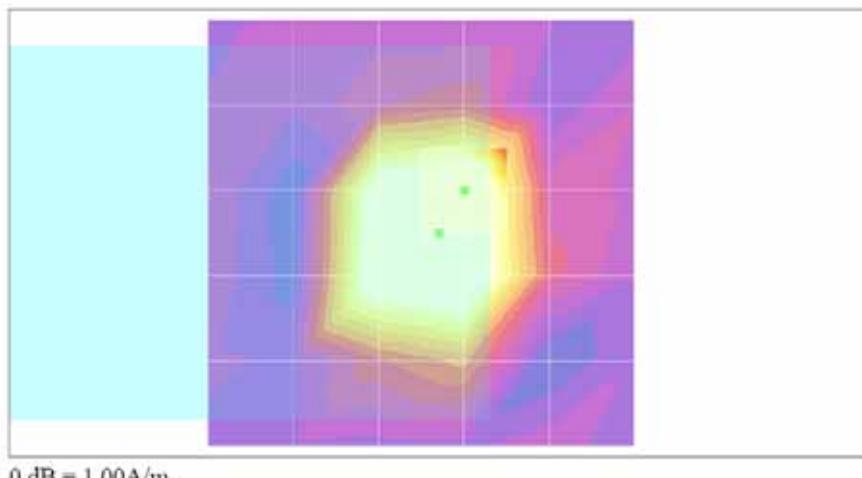
ABM1/ABM2 = 45.1 dB
ABM1 comp = 11.8 dB A/m
BWC Factor = 0.151969 dB
Location: -2, 0, 363.7 mm

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: 54.833
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 = 1.58 dB
BWC Factor = 10.8 dB
Location: -2, 0, 363.7 mm





Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA1900 Ch25_RC1 SO3_Voice_X longitudinal**DUT: 820515**

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

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 2.61 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 4.32 dB A/m

BWC Factor = 0.151969 dB

Location: 4, 0, 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

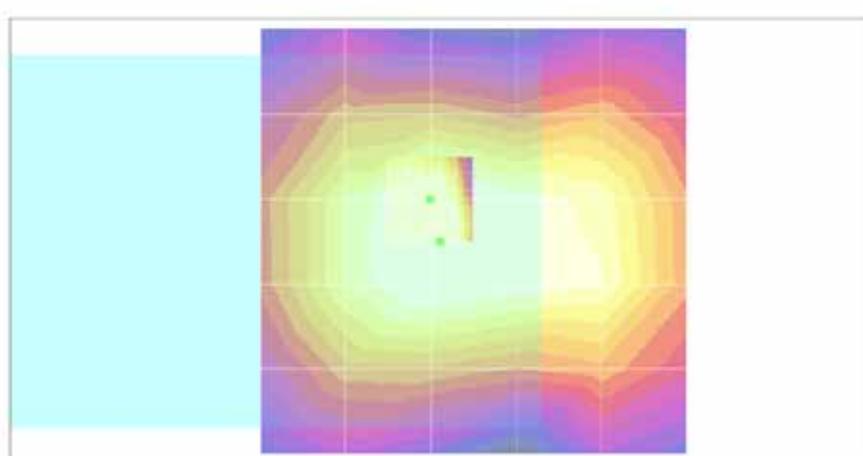
Cursor:

ABM1/ABM2 = 43.6 dB

ABM1 comp = 4.51 dB A/m

BWC Factor = 0.151969 dB

Location: 4, 0, 363.7 mm



0 dB = 1.00A/m



FCC HAC T-coil Test Report

Test Report No : HA820515-B

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date: 2008/3/30

T-Coil_CDMA1900 Ch25_RC1 SO3_Voicee_Y transversal

DUT: 820515

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

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

Ambient Temperature : 23.0 °C

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 Scan/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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 0.085 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 4.43 dB A/m

BWC Factor = 0.151969 dB

Location: 0, -8, 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

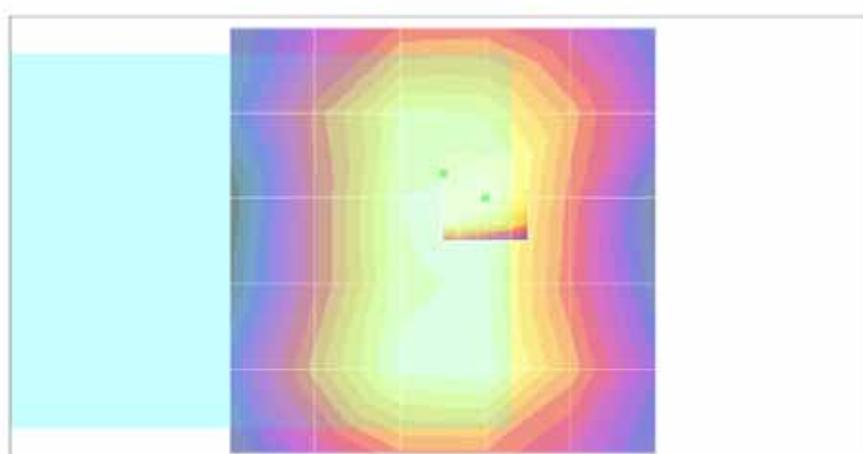
Cursor:

ABM1/ABM2 = 42.5 dB

ABM1 comp = 2.64 dB A/m

BWC Factor = 0.151969 dB

Location: 0, -8, 363.7 mm



0 dB = 1.00A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA1900 Ch25_RC1 SO3_Voice_Z Axial**DUT: 820515**

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

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 6.12 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 12.1 dB A/m

BWC Factor = 0.151969 dB

Location: 0, 0, 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: 27.998
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.151969 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

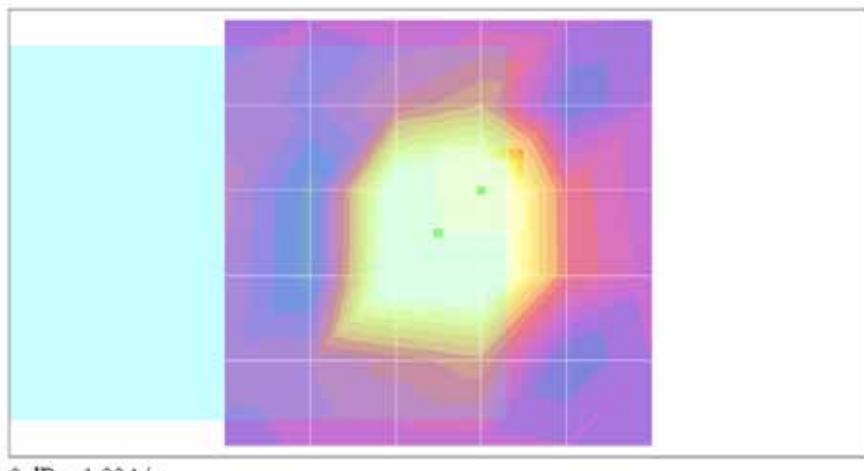
ABM1/ABM2 = 46.0 dB
ABM1 comp = 12.7 dB A/m
BWC Factor = 0.151969 dB
Location: 0, 0, 363.7 mm

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: 54.833
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 = 1.43 dB
BWC Factor = 10.8 dB
Location: 0, 0, 363.7 mm



0 dB = 1.00A/m



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

T-Coil_CDMA1900 Ch600_RC1 SO3_Voice_X longitudinal**DUT: 820515**

Communication System: CDMA ; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ mho/m, $\epsilon_r = 1$; $\rho = 1$ kg/m³
Ambient Temperature : 23.0 °C

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: 27.998
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.151969 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 1.77 dB A/m
BWC Factor = 0.151969 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: 27.998
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.151969 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 4.88 dB A/m
BWC Factor = 0.151969 dB
Location: -6, 0, 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.152993 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

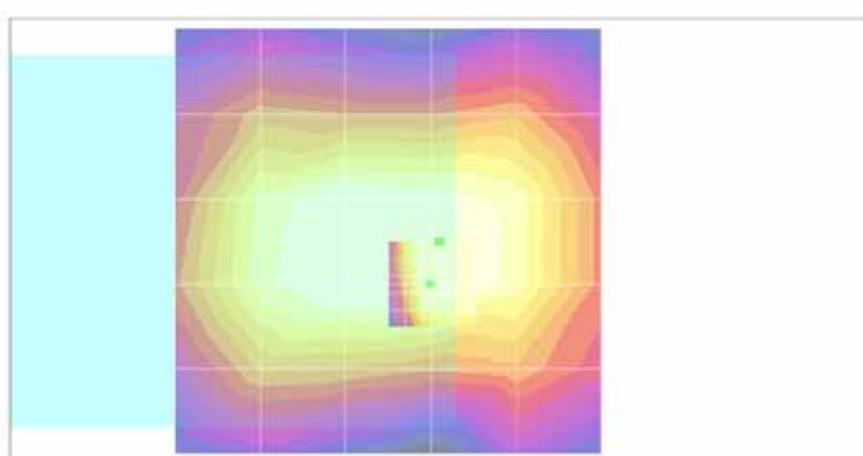
Cursor:

ABM1/ABM2 = 42.9 dB

ABM1 comp = 3.71 dB A/m

BWC Factor = 0.152993 dB

Location: -6, 0, 363.7 mm



0 dB = 1.00A/m



FCC HAC T-coil Test Report

Test Report No : HA820515-B

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA1900 Ch600_RC1 SO3_Voice_Y transversal

DUT: 820515

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

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

Ambient Temperature : 23.0 °C

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 Scan/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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 0.752 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 2.96 dB A/m

BWC Factor = 0.151969 dB

Location: 0, -8, 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.152993 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

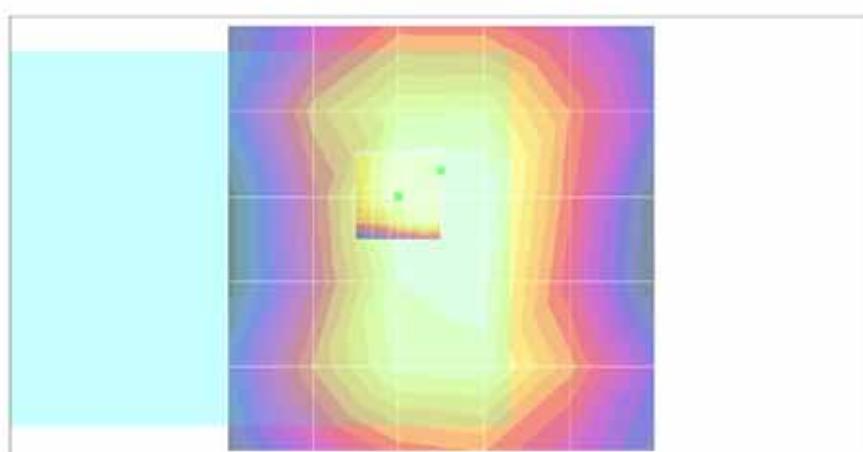
Cursor:

ABM1/ABM2 = 44.0 dB

ABM1 comp = 4.35 dB A/m

BWC Factor = 0.152993 dB

Location: 0, -8, 363.7 mm



0 dB = 1.00A/m



Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA1900 Ch600_RC1 SO3_Voice_Z Axial**DUT: 820515**

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

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 7.89 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 11.6 dB A/m

BWC Factor = 0.151969 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: 27.998
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.152993 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

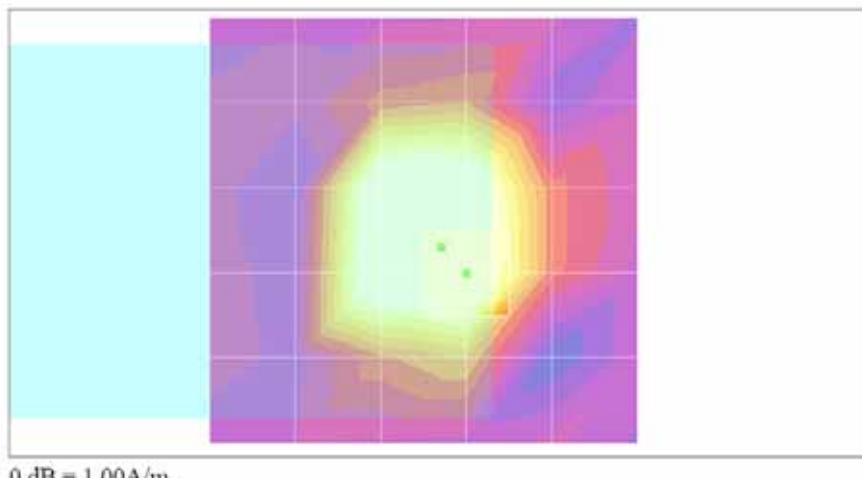
ABM1/ABM2 = 46.4 dB
ABM1 comp = 12.4 dB A/m
BWC Factor = 0.152993 dB
Location: -2, 2, 363.7 mm

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: 54.833
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 = 2.00 dB
BWC Factor = 10.8 dB
Location: -2, 2, 363.7 mm





Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA1900 Ch1175_RC1 SO3_Voice_X longitudinal**DUT: 820515**

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

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 2.67 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 5.07 dB A/m

BWC Factor = 0.151969 dB

Location: 6, 2, 363.7 mm



FCC HAC T-coil Test Report

Test Report No : HA820515-B

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

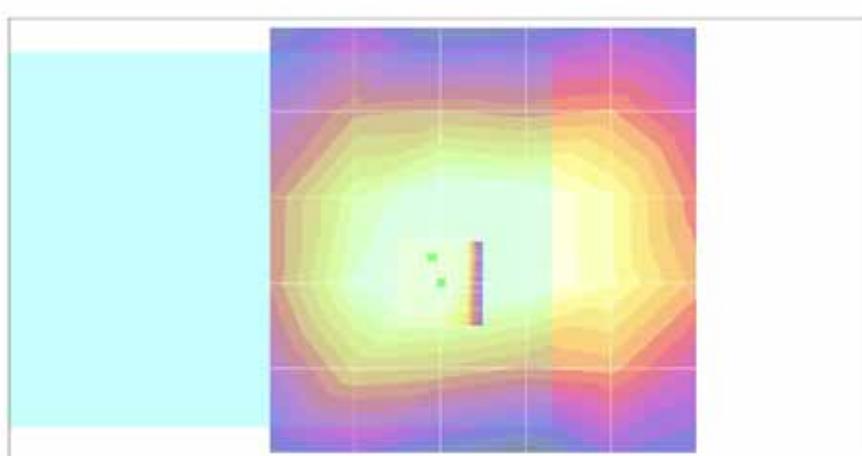
Cursor:

ABM1/ABM2 = 42.9 dB

ABM1 comp = 4.37 dB A/m

BWC Factor = 0.151969 dB

Location: 6, 2, 363.7 mm





FCC HAC T-coil Test Report

Test Report No : HA820515-B

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA1900 Ch1175_RC1 SO3_Voice_Y transversal

DUT: 820515

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

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

Ambient Temperature : 23.0 °C

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 Scan/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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = -0.150 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 3.54 dB A/m

BWC Factor = 0.151969 dB

Location: 0, -10, 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

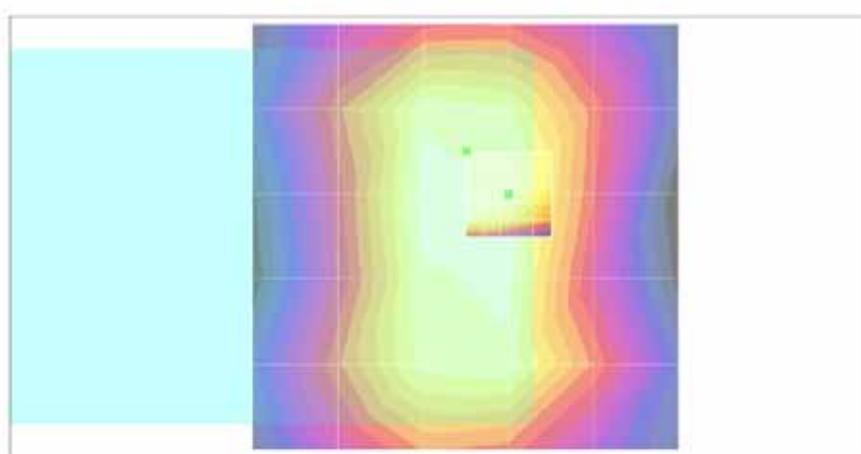
Cursor:

ABM1/ABM2 = 42.5 dB

ABM1 comp = 2.64 dB A/m

BWC Factor = 0.151969 dB

Location: 0, -10, 363.7 mm





FCC HAC T-coil Test Report

Test Report No : HA820515-B

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Data:2008/3/30

T-Coil_CDMA1900 Ch1175_RC1 SO3_Voice_Z Axial

DUT: 820515

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

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

Ambient Temperature : 23.0 °C

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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 7.27 dB A/m

BWC Factor = 0.151969 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: 27.998

Measure Window Start: 0ms

Measure Window Length: 1000ms

BWC applied: 0.151969 dB

Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1 comp = 11.6 dB A/m

BWC Factor = 0.151969 dB

Location: 0, 2, 363.7 mm



FCC HAC T-coil Test Report

Test Report No : HA820515-B

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: 27.998
Measure Window Start: 0ms
Measure Window Length: 1000ms
BWC applied: 0.151969 dB
Device Reference Point: 0.000, 0.000, 353.7 mm

Cursor:

ABM1/ABM2 = 45.7 dB
ABM1 comp = 12.2 dB A/m
BWC Factor = 0.151969 dB
Location: 0, 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: 54.833
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 = 0.849 dB
BWC Factor = 10.8 dB
Location: 0, 2, 363.7 mm

