Appendix D

Contour Plots

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

1of 19

CDMA835 (1013CH)

Test Laboratory: HCT
File Name: 001_1013ch.da4

DUT: A410; Type: Bar
Program Name: HAC_TCoil_WD_Emission

Communication System: CDMA 835MHz FCC; Frequency: 824.7 MHz;Duty Cycle: 1:1
Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m^3
Phantom section: AMB with Coil Section

DASY4 Configuration:
- Probe: AM1DV2 - 1013; ; Calibrated: 2006-04-18
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2009-09-18
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Point measurement/x (longitudinal) at max x/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -34.3 dB A/m
Location: -10, -2.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 35.3 dB
ABM1 comp = 1.05 dB A/m
BWC Factor = 0.151969 dB
Location: -10, -2.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 1.05 dB A/m
BWC Factor = 0.151969 dB
Location: -10, -2.5, 363.7 mm

Point measurement/y (transversal) at max y/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -33.3 dB A/m
Location: 1.5, -8, 363.7 mm

Point measurement/y (transversal) at max y/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 33.1 dB
ABM1 comp = -0.222 dB A/m
BWC Factor = 0.151969 dB
Location: 1.5, -8, 363.7 mm

Point measurement/y (transversal) at max y/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = -0.222 dB A/m
BWC Factor = 0.151969 dB
Location: 1.5, -8, 363.7 mm

Scans/z (axial) 15 x 15/ABM Signal(x,y,z) (8x8x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 9.50 dB A/m
BWC Factor = 0.15103 dB
Location: -0.5, -1.5, 363.7 mm

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

2of 19

Point measurement/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
Diff = 1.86 dB
BWC Factor = 10.8 dB
Location: 1.3, -3.2, 365 mm

Point measurement/z (axial) at max z/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -27.0 dB A/m
Location: -0.5, -1.5, 363.7 mm

Point measurement/z (axial) at max z/ABM SNR(x,y,z) (1x1x1):
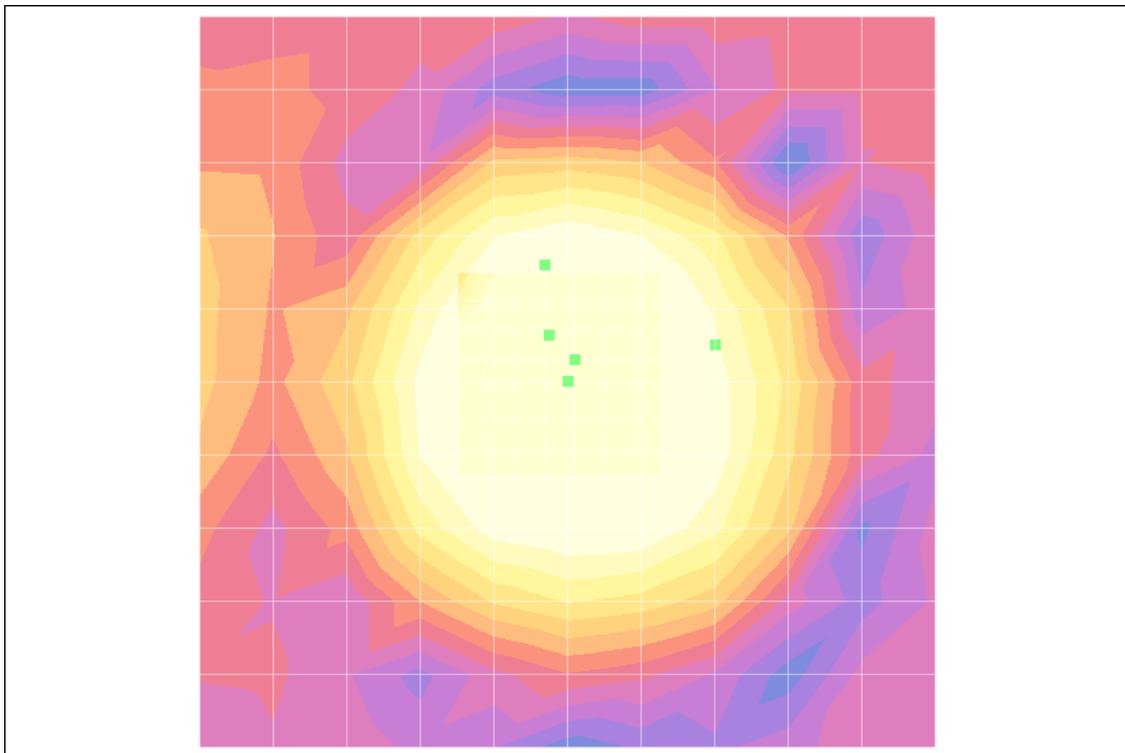Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 34.8 dB
ABM1 comp = 7.83 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, -1.5, 363.7 mm

Point measurement/z (axial) at max z/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 7.83 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, -1.5, 363.7 mm

Scans/z (axial) rough 50 x 50/ABM Signal(x,y,z) (11x11x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 9.36 dB A/m
BWC Factor = 0.15103 dB
Location: 0, 0, 363.7 mm

0 dB = 1.00A/m

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

3of 19

CDMA835 (384CH)

Test Laboratory: HCT
File Name: 002_384ch.da4

DUT: A410; Type: Bar
Program Name: HAC_TCoil_WD_Emission

Communication System: CDMA 835MHz FCC; Frequency: 836.52 MHz;Duty Cycle: 1:1
Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m^3
Phantom section: AMB with Coil Section

DASY4 Configuration:
- Probe: AM1DV2 - 1013; ; Calibrated: 2006-04-18
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2009-09-18
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Point measurement/x (longitudinal) at max x/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -37.6 dB A/m
Location: -10, 0.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 39.4 dB
ABM1 comp = 1.84 dB A/m
BWC Factor = 0.151969 dB
Location: -10, 0.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 1.84 dB A/m
BWC Factor = 0.151969 dB
Location: -10, 0.5, 363.7 mm

Point measurement/y (transversal) at max y/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -34.4 dB A/m
Location: 1.5, -6, 363.7 mm

Point measurement/y (transversal) at max y/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 34.8 dB
ABM1 comp = 0.407 dB A/m
BWC Factor = 0.151969 dB
Location: 1.5, -6, 363.7 mm

Point measurement/y (transversal) at max y/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 0.407 dB A/m
BWC Factor = 0.151969 dB
Location: 1.5, -6, 363.7 mm

Scans/z (axial) 15 x 15/ABM Signal(x,y,z) (8x8x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 10.2 dB A/m
BWC Factor = 0.15103 dB
Location: -2.5, -1.5, 363.7 mm

Point measurement/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
Diff = 2.00 dB
BWC Factor = 10.8 dB
Location: -0.8, -3.2, 365 mm

Point measurement/z (axial) at max z/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -30.6 dB A/m
Location: -2.5, -1.5, 363.7 mm

Point measurement/z (axial) at max z/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 39.3 dB
ABM1 comp = 8.65 dB A/m
BWC Factor = 0.151969 dB
Location: -2.5, -1.5, 363.7 mm

Point measurement/z (axial) at max z/ABM Signal(x,y,z) (1x1x1):
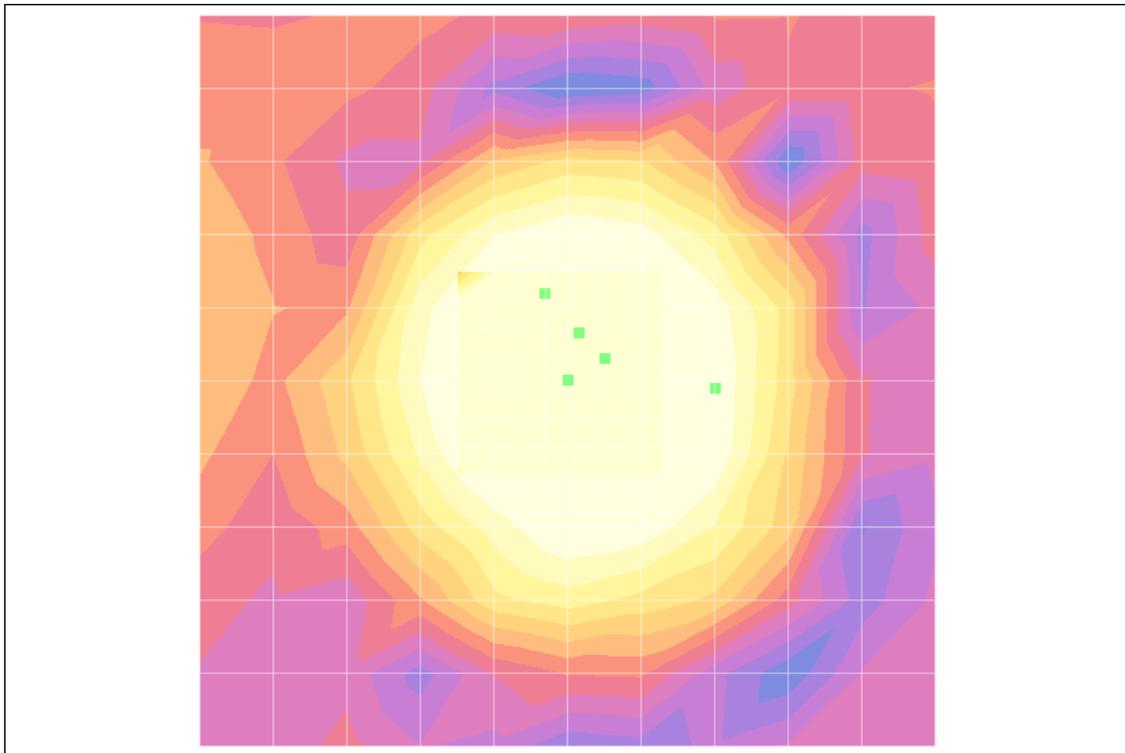Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 8.65 dB A/m
BWC Factor = 0.151969 dB
Location: -2.5, -1.5, 363.7 mm

Scans/z (axial) rough 50 x 50/ABM Signal(x,y,z) (11x11x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 10.2 dB A/m
BWC Factor = 0.15103 dB
Location: 0, 0, 363.7 mm

0 dB = 1.00A/m

CDMA800 (777CH)

Test Laboratory: HCT
File Name: 003_777ch.da4

DUT: A410; Type: Bar
Program Name: HAC_TCoil_WD_Emission

Communication System: CDMA 835MHz FCC; Frequency: 848.31 MHz;Duty Cycle: 1:1
Medium parameters used: σ = 0 mho/m, $ε_r$ = 1; ρ = 1 kg/m^3
Phantom section: AMB with Coil Section

DASY4 Configuration:
- Probe: AM1DV2 - 1013; ; Calibrated: 2006-04-18
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2009-09-18
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Point measurement/x (longitudinal) at max x/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -36.0 dB A/m
Location: -8, 0.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 36.8 dB
ABM1 comp = 0.851 dB A/m
BWC Factor = 0.151969 dB
Location: -8, 0.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 0.851 dB A/m
BWC Factor = 0.151969 dB
Location: -8, 0.5, 363.7 mm

Point measurement/y (transversal) at max y/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -36.8 dB A/m
Location: -0.5, -7, 363.7 mm

Point measurement/y (transversal) at max y/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 37.0 dB
ABM1 comp = 0.233 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, -7, 363.7 mm

Point measurement/y (transversal) at max y/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 0.233 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, -7, 363.7 mm

Scans/z (axial) 15 x 15/ABM Signal(x,y,z) (8x8x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 9.65 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, 2.5, 363.7 mm

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

6of 19

Point measurement/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
Diff = 2.00 dB
BWC Factor = 10.8 dB
Location: 1.2, 0.8, 365 mm

Point measurement/z (axial) at max z/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -29.9 dB A/m
Location: -0.5, 2.5, 363.7 mm

Point measurement/z (axial) at max z/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 38.8 dB
ABM1 comp = 8.93 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, 2.5, 363.7 mm

Point measurement/z (axial) at max z/ABM Signal(x,y,z) (1x1x1):
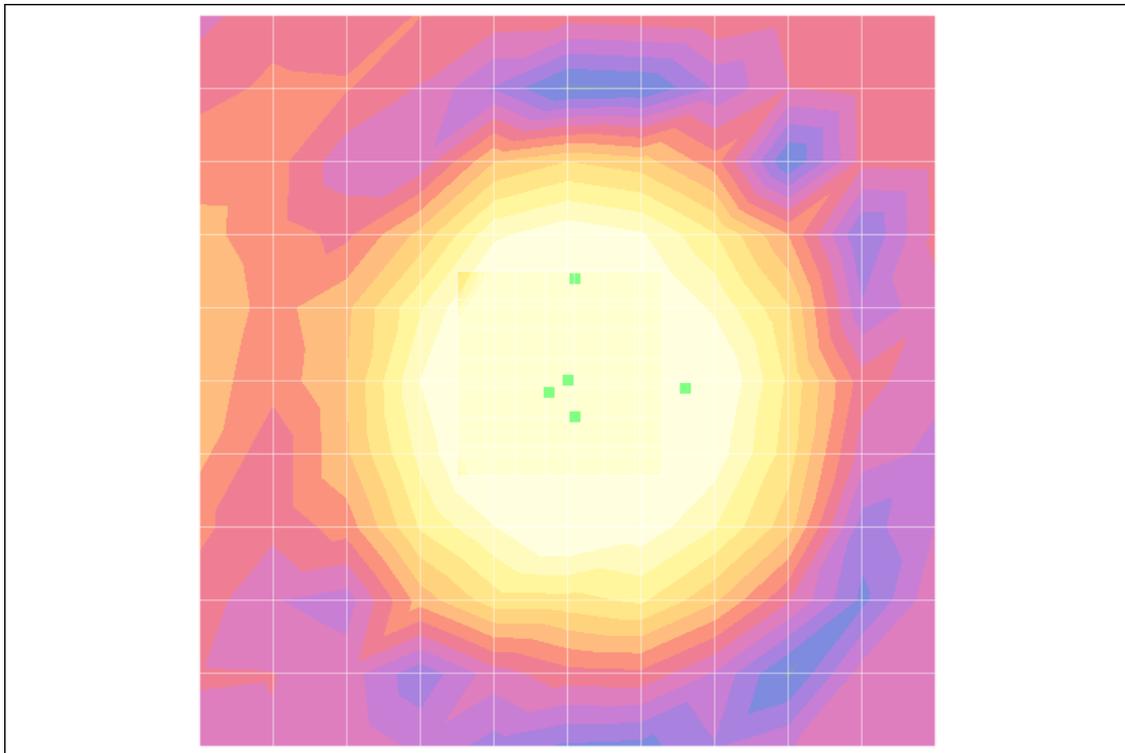Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 8.93 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, 2.5, 363.7 mm

Scans/z (axial) rough 50 x 50/ABM Signal(x,y,z) (11x11x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 8.95 dB A/m
BWC Factor = 0.151969 dB
Location: 0, 0, 363.7 mm

0 dB = 1.00A/m

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

7of 19

PCS1900 (25CH)

Test Laboratory: HCT
File Name: 004_25ch.da4

DUT: A410; Type: Bar
Program Name: HAC_TCoil_WD_Emission

Communication System: PCS 1900MHz FCC; Frequency: 1851.25 MHz;Duty Cycle: 1:1
Medium parameters used: σ = 0 mho/m, $ε_r$ = 1; ρ = 1 kg/m^3
Phantom section: AMB with Coil Section

DASY4 Configuration:
- Probe: AM1DV2 - 1013; ; Calibrated: 2006-04-18
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2009-09-18
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Point measurement/x (longitudinal) at max x/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -38.0 dB A/m
Location: -8, 2.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 39.2 dB
ABM1 comp = 1.23 dB A/m
BWC Factor = 0.15103 dB
Location: -8, 2.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 1.23 dB A/m
BWC Factor = 0.15103 dB
Location: -8, 2.5, 363.7 mm

Point measurement/y (transversal) at max y/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -36.3 dB A/m
Location: 2.5, -8, 363.7 mm

Point measurement/y (transversal) at max y/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
₩**Cursor:**
ABM1/ABM2 = 35.9 dB
ABM1 comp = -0.369 dB A/m
BWC Factor = 0.15103 dB
Location: 2.5, -8, 363.7 mm

Point measurement/y (transversal) at max y/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
₩**Cursor:**
ABM1 comp = -0.369 dB A/m
BWC Factor = 0.15103 dB
Location: 2.5, -8, 363.7 mm

Scans/z (axial) 15 x 15/ABM Signal(x,y,z) (8x8x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 10.3 dB A/m
BWC Factor = 0.151969 dB
Location: -2.5, 0.5, 363.7 mm

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

8of 19

Point measurement/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm

Cursor:
Diff = 2.00 dB
BWC Factor = 10.8 dB
Location: -0.7, -1.2, 365 mm

Point measurement/z (axial) at max z/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Cursor:
ABM2 = -31.9 dB A/m
Location: -2.5, 0.5, 363.7 mm

Point measurement/z (axial) at max z/ABM SNR(x,y,z) (1x1x1):
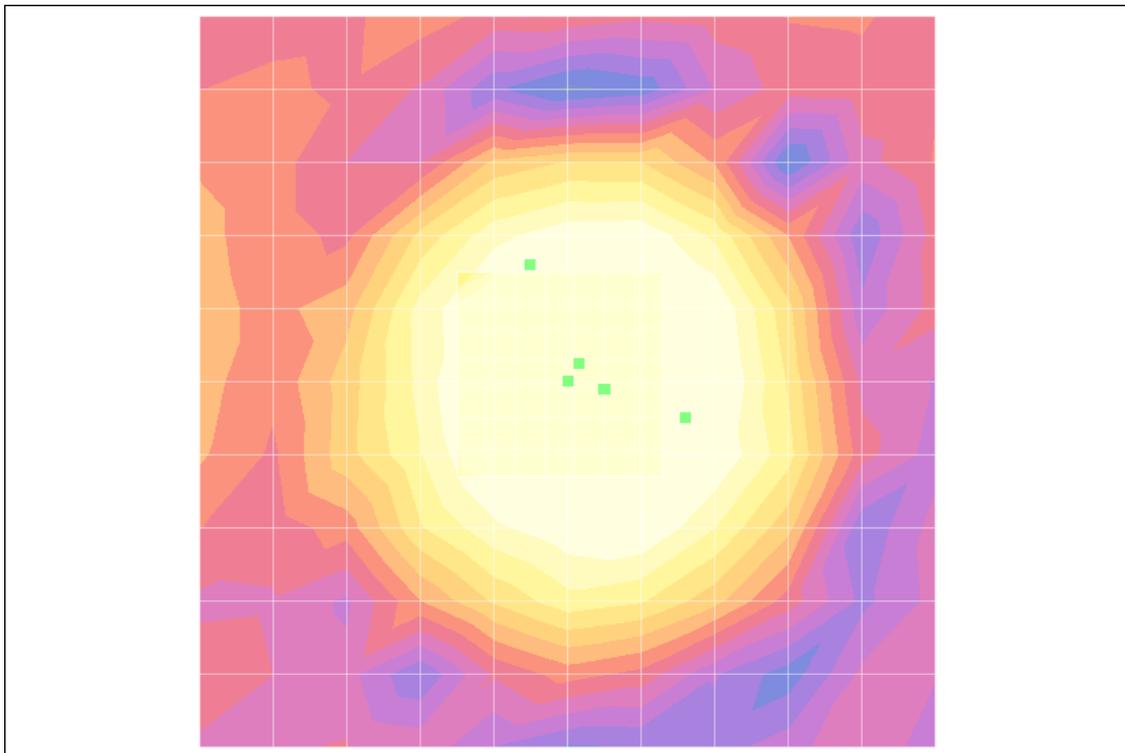Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 41.0 dB
ABM1 comp = 9.06 dB A/m
BWC Factor = 0.15103 dB
Location: -2.5, 0.5, 363.7 mm

Point measurement/z (axial) at max z/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 9.06 dB A/m
BWC Factor = 0.15103 dB
Location: -2.5, 0.5, 363.7 mm

Scans/z (axial) rough 50 x 50/ABM Signal(x,y,z) (11x11x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 9.22 dB A/m
BWC Factor = 0.151969 dB
Location: 0, 0, 363.7 mm

0 dB = 1.00A/m

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

9of 19

PCS1900 (600CH)

Test Laboratory: HCT
File Name: 005_600ch.da4

DUT: A410; Type: Bar
Program Name: HAC_TCoil_WD_Emission

Communication System: PCS 1900MHz FCC; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m^3
Phantom section: AMB with Coil Section

DASY4 Configuration:
- Probe: AM1DV2 - 1013; ; Calibrated: 2006-04-18
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2009-09-18
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Point measurement/x (longitudinal) at max x/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -36.2 dB A/m
Location: -8, -3.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 36.7 dB
ABM1 comp = 0.458 dB A/m
BWC Factor = 0.15103 dB
Location: -8, -3.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 0.458 dB A/m
BWC Factor = 0.15103 dB
Location: -8, -3.5, 363.7 mm

Point measurement/y (transversal) at max y/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -38.4 dB A/m
Location: -0.5, -8, 363.7 mm

Point measurement/y (transversal) at max y/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 39.6 dB
ABM1 comp = 1.17 dB A/m
BWC Factor = 0.15103 dB
Location: -0.5, -8, 363.7 mm

Point measurement/y (transversal) at max y/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 1.17 dB A/m
BWC Factor = 0.15103 dB
Location: -0.5, -8, 363.7 mm

Scans/z (axial) 15 x 15/ABM Signal(x,y,z) (8x8x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 9.21 dB A/m
BWC Factor = 0.151969 dB
Location: -2.5, 0.5, 363.7 mm

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

10of 19

Point measurement/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
Diff = 2.00 dB
BWC Factor = 10.8 dB
Location: -0.7, -1.2, 365 mm

Point measurement/z (axial) at max z/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -31.9 dB A/m
Location: -2.5, 0.5, 363.7 mm

Point measurement/z (axial) at max z/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 39.9 dB
ABM1 comp = 7.98 dB A/m
BWC Factor = 0.15103 dB
Location: -2.5, 0.5, 363.7 mm

Point measurement/z (axial) at max z/ABM Signal(x,y,z) (1x1x1):
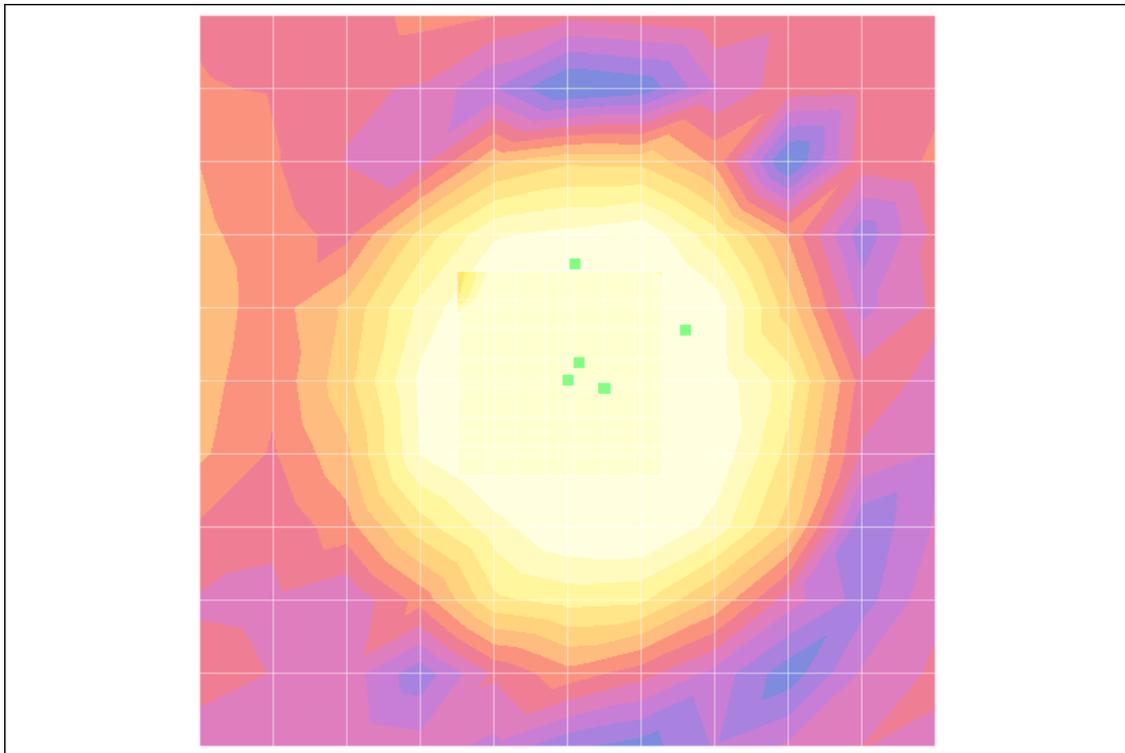Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 7.98 dB A/m
BWC Factor = 0.15103 dB
Location: -2.5, 0.5, 363.7 mm

Scans/z (axial) rough 50 x 50/ABM Signal(x,y,z) (11x11x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 9.58 dB A/m
BWC Factor = 0.151969 dB
Location: 0, 0, 363.7 mm

0 dB = 1.00A/m

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

11of 19

PCS1900 (1175CH)

Test Laboratory: HCT
File Name: 006_1175ch.da4

DUT: A410; Type: Bar
Program Name: HAC_TCoil_WD_Emission

Communication System: PCS 1900MHz FCC; Frequency: 1908.75 MHz;Duty Cycle: 1:1
Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m^3
Phantom section: AMB with Coil Section

DASY4 Configuration:
- Probe: AM1DV2 - 1013; ; Calibrated: 2006-04-18
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2009-09-18
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Point measurement/x (longitudinal) at max x/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -36.9 dB A/m
Location: -10, -2.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 38.4 dB
ABM1 comp = 1.46 dB A/m
BWC Factor = 0.15103 dB
Location: -10, -2.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 1.46 dB A/m
BWC Factor = 0.15103 dB
Location: -10, -2.5, 363.7 mm

Point measurement/y (transversal) at max y/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -39.6 dB A/m
Location: -4.5, 8, 363.7 mm

Point measurement/y (transversal) at max y/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 39.3 dB
ABM1 comp = -0.261 dB A/m
BWC Factor = 0.15103 dB
Location: -4.5, 8, 363.7 mm

Point measurement/y (transversal) at max y/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = -0.261 dB A/m
BWC Factor = 0.15103 dB
Location: -4.5, 8, 363.7 mm

Scans/z (axial) 15 x 15/ABM Signal(x,y,z) (8x8x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 10.0 dB A/m
BWC Factor = 0.15103 dB
Location: -0.5, -1.5, 363.7 mm

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

12of 19

Point measurement/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
Diff = 2.00 dB
BWC Factor = 10.8 dB
Location: 1.3, -3.2, 365 mm

Point measurement/z (axial) at max z/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -29.6 dB A/m
Location: -0.5, -1.5, 363.7 mm

Point measurement/z (axial) at max z/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 38.6 dB
ABM1 comp = 8.96 dB A/m
BWC Factor = 0.15103 dB
Location: -0.5, -1.5, 363.7 mm

Point measurement/z (axial) at max z/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 8.96 dB A/m
BWC Factor = 0.15103 dB
Location: -0.5, -1.5, 363.7 mm

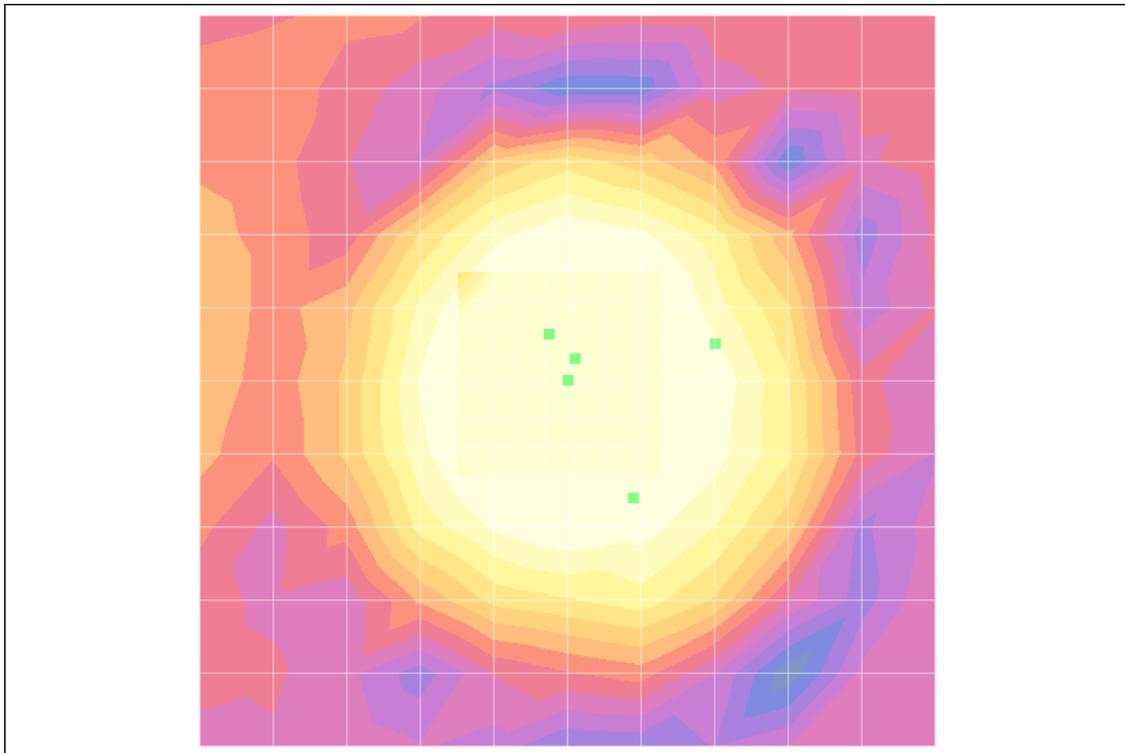**Scans/z (axial) rough 50 x 50/ABM Signal(x,y,z) (11x11x1):**
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 9.27 dB A/m
BWC Factor = 0.15103 dB
Location: 0, 0, 363.7 mm

0 dB = 1.00A/m

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

13of 19

AWS1700 (25CH)

Test Laboratory: HCT
File Name: 007_25ch.da4

DUT: A410; Type: Bar
Program Name: HAC_TCoil_WD_Emission

Communication System: AWS 1700 MHz FCC; Frequency: 1711.25 MHz;Duty Cycle: 1:1
Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m^3
Phantom section: AMB with Coil Section

DASY4 Configuration:
- Probe: AM1DV2 – 1013; ; Calibrated: 2006–04–18
- Sensor–Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2009–09–18
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Point measurement/x (longitudinal) at max x/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = –37.8 dB A/m
Location: –10, 1.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 39.7 dB
ABM1 comp = 1.90 dB A/m
BWC Factor = 0.15103 dB
Location: –10, 1.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 1.90 dB A/m
BWC Factor = 0.15103 dB
Location: –10, 1.5, 363.7 mm

Point measurement/y (transversal) at max y/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = –39.7 dB A/m
Location: –2.5, –12, 363.7 mm

Point measurement/y (transversal) at max y/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 39.9 dB
ABM1 comp = 0.202 dB A/m
BWC Factor = 0.15103 dB
Location: –2.5, –12, 363.7 mm

Point measurement/y (transversal) at max y/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 0.202 dB A/m
BWC Factor = 0.15103 dB
Location: –2.5, –12, 363.7 mm

Scans/z (axial) 15 x 15/ABM Signal(x,y,z) (8x8x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 9.45 dB A/m
BWC Factor = 0.151969 dB
Location: –2.5, 2.5, 363.7 mm

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

14of 19

Point measurement/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
Diff = 2.00 dB
BWC Factor = 10.8 dB
Location: -0.8, 0.8, 365 mm

Point measurement/z (axial) at max z/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -29.8 dB A/m
Location: -2.5, 2.5, 363.7 mm

Point measurement/z (axial) at max z/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 37.5 dB
ABM1 comp = 7.70 dB A/m
BWC Factor = 0.15103 dB
Location: -2.5, 2.5, 363.7 mm

Point measurement/z (axial) at max z/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 7.70 dB A/m
BWC Factor = 0.15103 dB
Location: -2.5, 2.5, 363.7 mm

Scans/z (axial) rough 50 x 50/ABM Signal(x,y,z) (11x11x1):
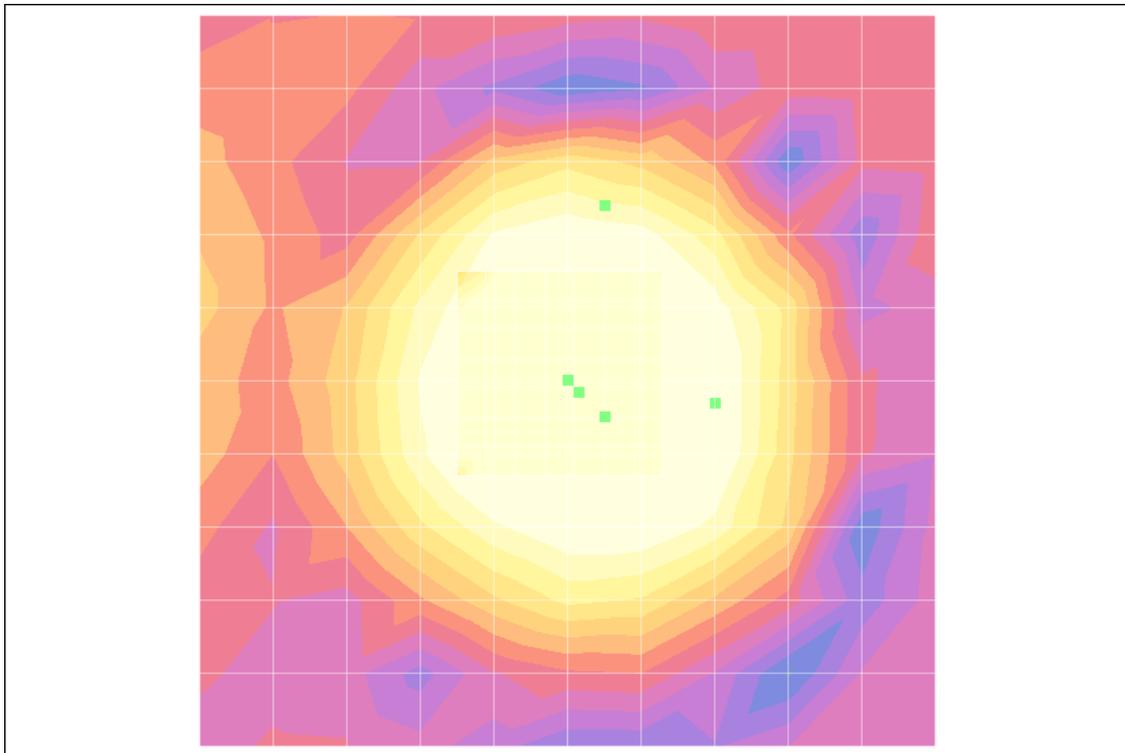Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 9.58 dB A/m
BWC Factor = 0.151969 dB
Location: 0, 0, 363.7 mm

0 dB = 1.00A/m

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

15of 19

AWS1700 (450CH)

Test Laboratory: HCT
File Name: 008_450ch.da4

DUT: A410; Type: Bar
Program Name: HAC_TCoil_WD_Emission

Communication System: AWS 1700 MHz FCC; Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used: σ = 0 mho/m, ε_r = 1; ρ = 1 kg/m³
Phantom section: AMB with Coil Section

DASY4 Configuration:
- Probe: AM1DV2 - 1013; ; Calibrated: 2006-04-18
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2009-09-18
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Point measurement/x (longitudinal) at max x/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -41.4 dB A/m
Location: -12, -3.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 41.8 dB
ABM1 comp = 0.485 dB A/m
BWC Factor = 0.151969 dB
Location: -12, -3.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 0.485 dB A/m
BWC Factor = 0.151969 dB
Location: -12, -3.5, 363.7 mm

Point measurement/y (transversal) at max y/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -39.4 dB A/m
Location: -0.5, -8, 363.7 mm

Point measurement/y (transversal) at max y/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 39.0 dB
ABM1 comp = -0.344 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, -8, 363.7 mm

Point measurement/y (transversal) at max y/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = -0.344 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, -8, 363.7 mm

Scans/z (axial) 15 x 15/ABM Signal(x,y,z) (8x8x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 10.7 dB A/m
BWC Factor = 0.152993 dB
Location: -2.5, 0.5, 363.7 mm

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

16of 19

Point measurement/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
Diff = 1.35 dB
BWC Factor = 10.8 dB
Location: -0.7, -1.2, 365 mm

Point measurement/z (axial) at max z/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -32.9 dB A/m
Location: -2.5, 0.5, 363.7 mm

Point measurement/z (axial) at max z/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 41.7 dB
ABM1 comp = 8.82 dB A/m
BWC Factor = 0.151969 dB
Location: -2.5, 0.5, 363.7 mm

Point measurement/z (axial) at max z/ABM Signal(x,y,z) (1x1x1):
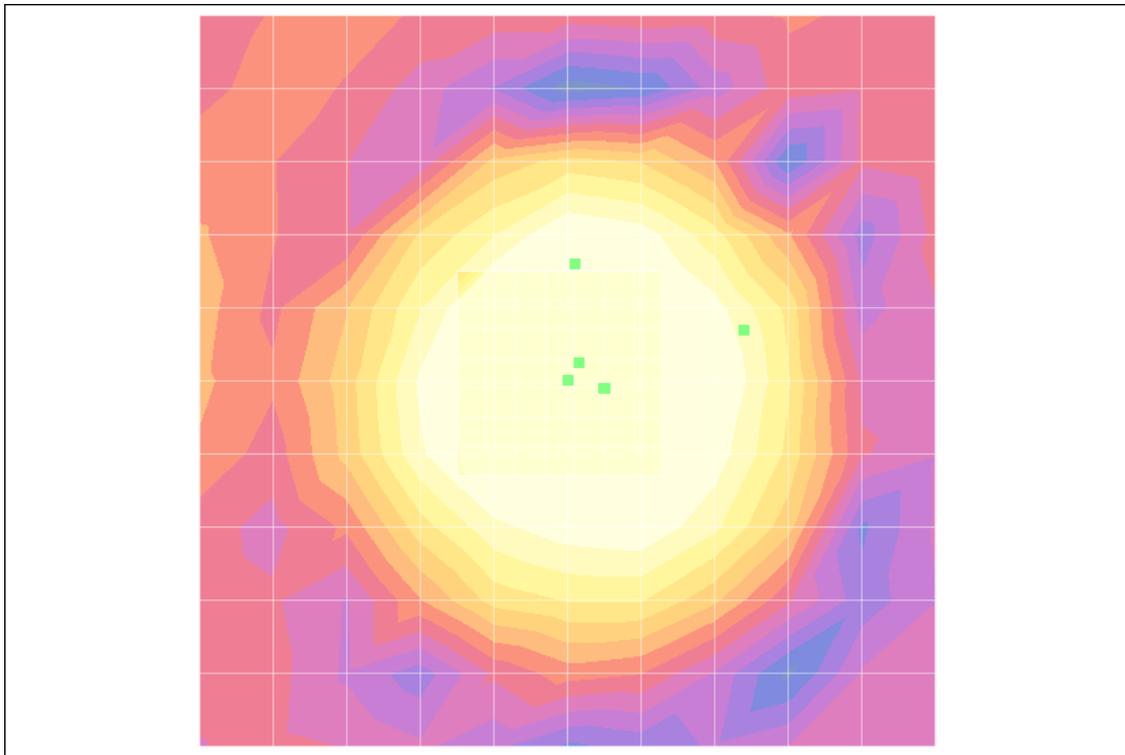Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 8.82 dB A/m
BWC Factor = 0.151969 dB
Location: -2.5, 0.5, 363.7 mm

Scans/z (axial) rough 50 x 50/ABM Signal(x,y,z) (11x11x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 8.38 dB A/m
BWC Factor = 0.152993 dB
Location: 0, 0, 363.7 mm

0 dB = 1.00A/m

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

17of 19

AWS1700 (875CH)

Test Laboratory: HCT
File Name: 009_875ch.da4

DUT: A410; Type: Bar
Program Name: HAC_TCoil_WD_Emission

Communication System: AWS 1700 MHz FCC; Frequency: 1753.75 MHz;Duty Cycle: 1:1
Medium parameters used: σ = 0 mho/m, $ε_r$ = 1; ρ = 1 kg/m^3
Phantom section: AMB with Coil Section

DASY4 Configuration:
- Probe: AM1DV2 - 1013; ; Calibrated: 2006-04-18
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn869; Calibrated: 2009-09-18
- Phantom: HAC Test Arch with Coil; Type: SD HAC P01 BA
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Point measurement/x (longitudinal) at max x/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -37.8 dB A/m
Location: -8, 0.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 40.0 dB
ABM1 comp = 2.27 dB A/m
BWC Factor = 0.151969 dB
Location: -8, 0.5, 363.7 mm

Point measurement/x (longitudinal) at max x/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 2.27 dB A/m
BWC Factor = 0.151969 dB
Location: -8, 0.5, 363.7 mm

Point measurement/y (transversal) at max y/ABM Noise(x,y,z) (1x1x1):
Cursor:
ABM2 = -38.9 dB A/m
Location: -0.5, -10, 363.7 mm

Point measurement/y (transversal) at max y/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 39.1 dB
ABM1 comp = 0.154 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, -10, 363.7 mm

Point measurement/y (transversal) at max y/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 0.154 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, -10, 363.7 mm

Scans/z (axial) 15 x 15/ABM Signal(x,y,z) (8x8x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 9.62 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, 0.5, 363.7 mm

Point measurement/z (axial) 300-3k response at max/ABM Freq Resp(x,y,z,f) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
Diff = 2.00 dB
BWC Factor = 10.8 dB
Location: 1.2, -1.2, 365 mm

Point measurement/z (axial) at max z/ABM Noise(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM2 = -30.6 dB A/m
Location: -0.5, 0.5, 363.7 mm

Point measurement/z (axial) at max z/ABM SNR(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1/ABM2 = 38.0 dB
ABM1 comp = 7.37 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, 0.5, 363.7 mm

Point measurement/z (axial) at max z/ABM Signal(x,y,z) (1x1x1):
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 7.37 dB A/m
BWC Factor = 0.151969 dB
Location: -0.5, 0.5, 363.7 mm

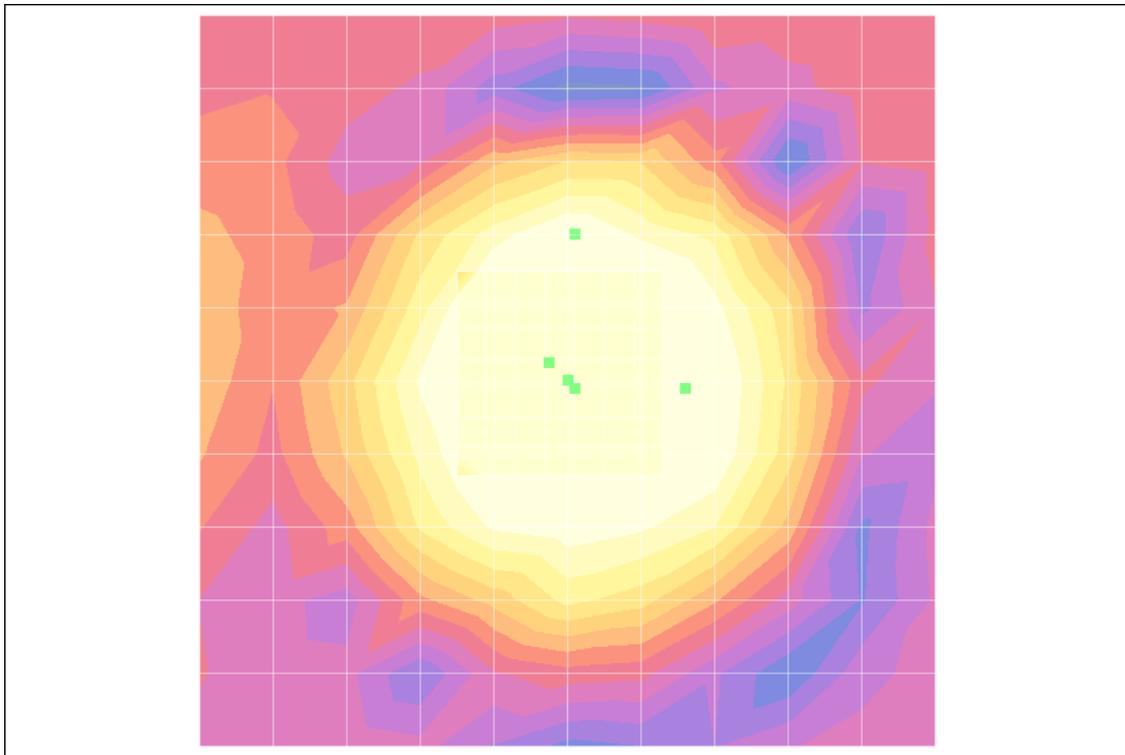**Scans/z (axial) rough 50 x 50/ABM Signal(x,y,z) (11x11x1):**
Measurement grid: dx=10mm, dy=10mm
Cursor:
ABM1 comp = 8.63 dB A/m
BWC Factor = 0.151969 dB
Location: 0, 0, 363.7 mm

0 dB = 1.00A/m

HCT CO., LTD
SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA
TEL : + 82 31 639 8518   FAX : + 82 31 639 8525   www.hct.co.kr

19of 19