Appendix A. T-Coil Measurement Plots

Table of contents
T-Coil Measurement plots of GSM850
T-Coil Measurement plots of GSM1900
T-Coil Measurement plots of UMTS Band2
T-Coil Measurement plots of UMTS Band4
T-Coil Measurement plots of UMTS Band5
T-Coil Measurement plots of LTE Band2
T-Coil Measurement plots of LTE Band4
T-Coil Measurement plots of LTE Band5
T-Coil Measurement plots of LTE Band7
T-Coil Measurement plots of LTE Band12
T-Coil Measurement plots of LTE Band17

Date: 2018-2-10

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 GSM850 190CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30042
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

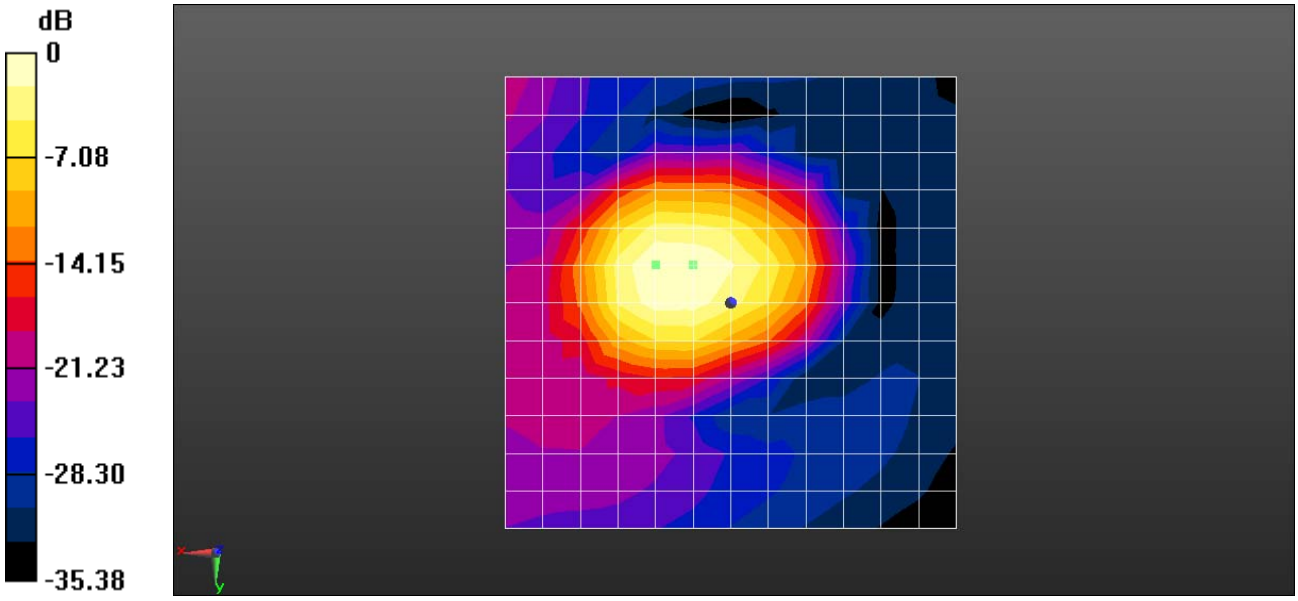
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.06 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 28.45 dB
ABM1 comp = 9.63 dBA/m
BWC Factor = 0.06 dB
Location: 4.2, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.06 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 9.67 dBA/m
BWC Factor = 0.06 dB
Location: 8.3, -4.2, 3.7 mm



0 dB = 26.45 = 28.45 dB

Date: 2018-2-10

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 GSM850 190CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30042
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

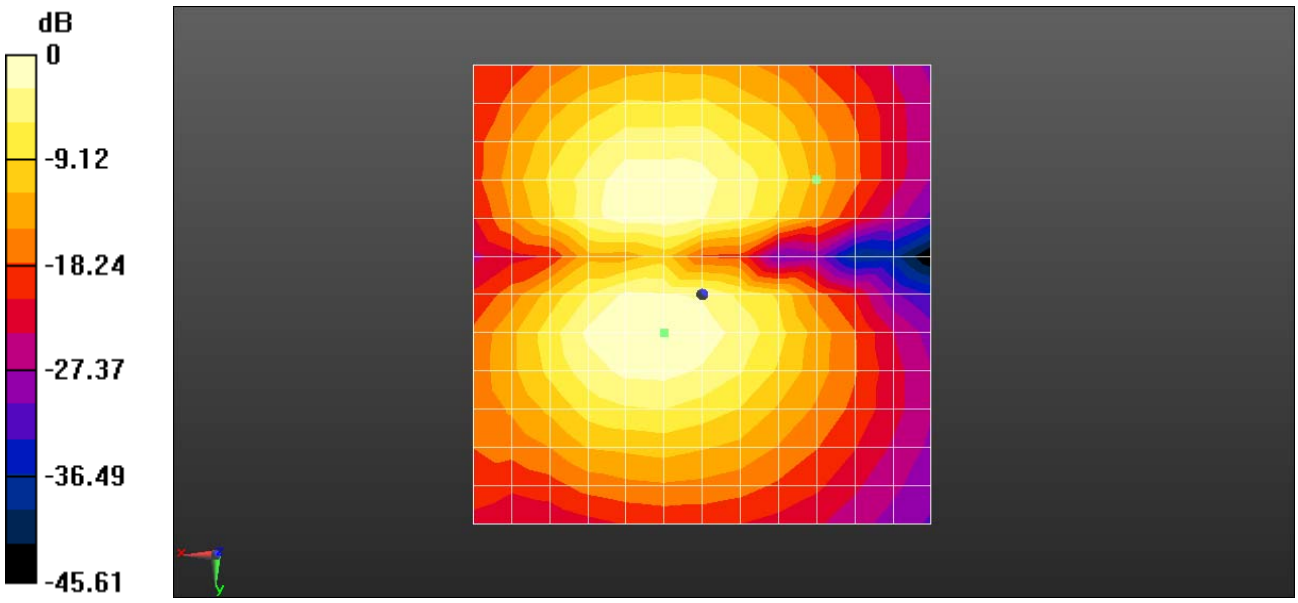
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.06 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 38.16 dB
ABM1 comp = -11.40 dBA/m
BWC Factor = 0.06 dB
Location: -12.5, -12.5, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.06 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 2.76 dBA/m
BWC Factor = 0.06 dB
Location: 4.2, 4.2, 3.7 mm



0 dB = 80.91 = 38.16 dB

Date: 2018-2-10

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 GSM850 190CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30042
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.06 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 28.45 dB
ABM1 comp = 9.63 dBA/m
BWC Factor = 0.06 dB
Location: 4.2, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

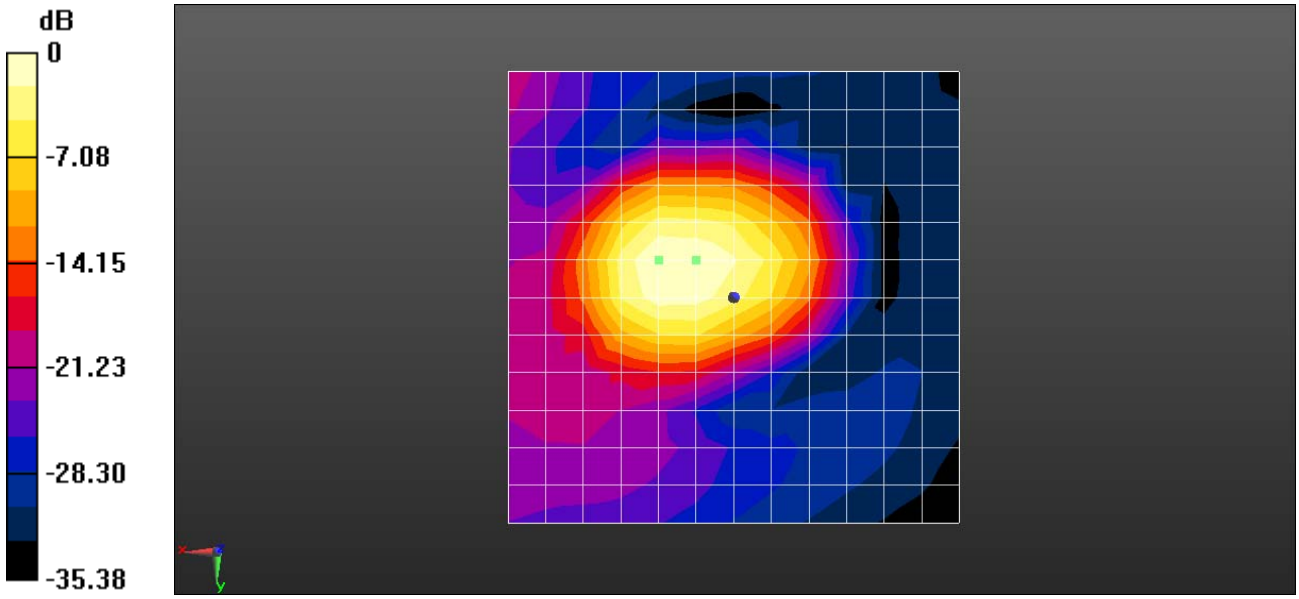
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.06 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 9.67 dBA/m
BWC Factor = 0.06 dB
Location: 8.3, -4.2, 3.7 mm

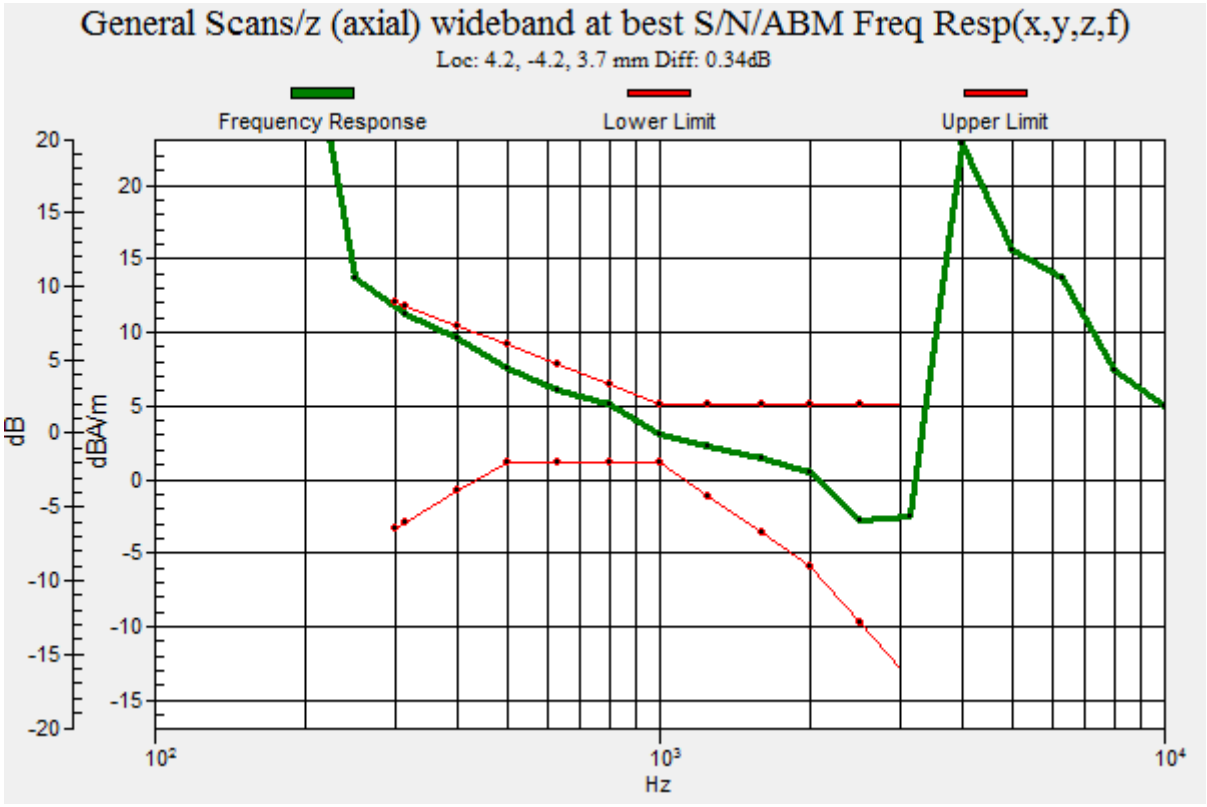
T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial)

wideband at best S/N/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: 100
Measure Window Start: 300ms
Measure Window Length: 2000ms
BWC applied: 10.69 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
Diff = 0.34 dB
BWC Factor = 10.69 dB
Location: 4.2, -4.2, 3.7 mm



0 dB = 26.45 = 28.45 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -4.2, 3.7 mm Diff: 0.34dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
10²
10³
10⁴

Date: 2018-2-6

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 GSM1900 661CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

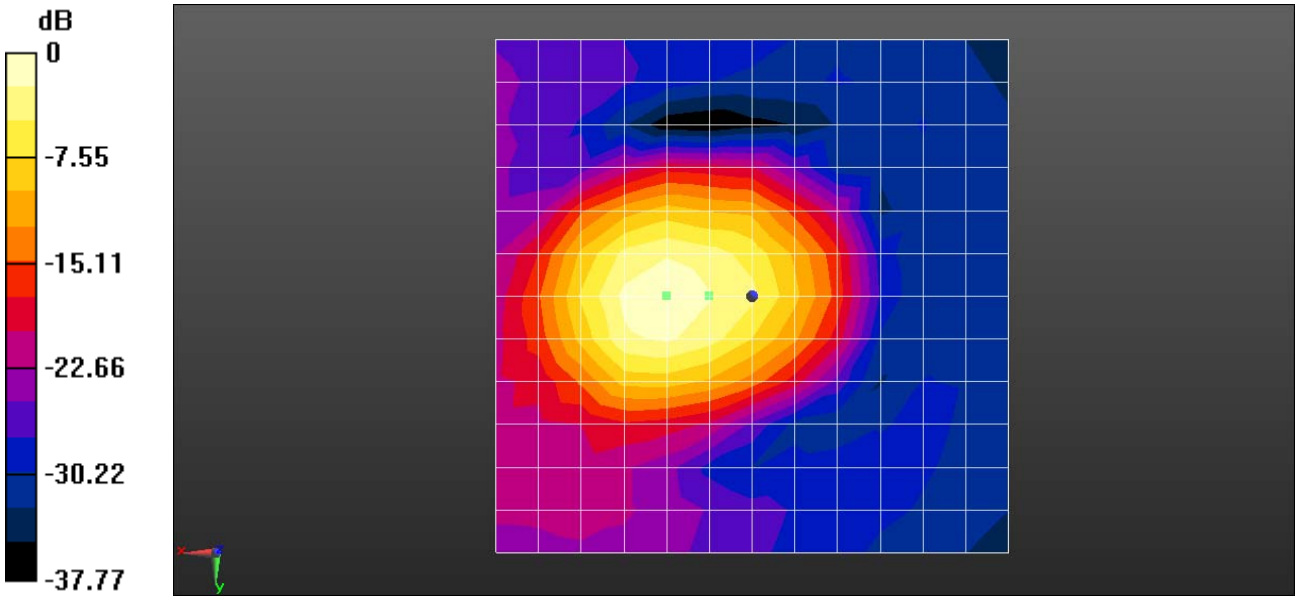
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 33.69 dB
ABM1 comp = 11.35 dBA/m
BWC Factor = 0.13 dB
Location: 4.2, 0, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.04 dBA/m
BWC Factor = 0.13 dB
Location: 8.3, 0, 3.7 mm



0 dB = 48.39 = 33.70 dB

Date: 2018-2-6

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 GSM1900 661CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

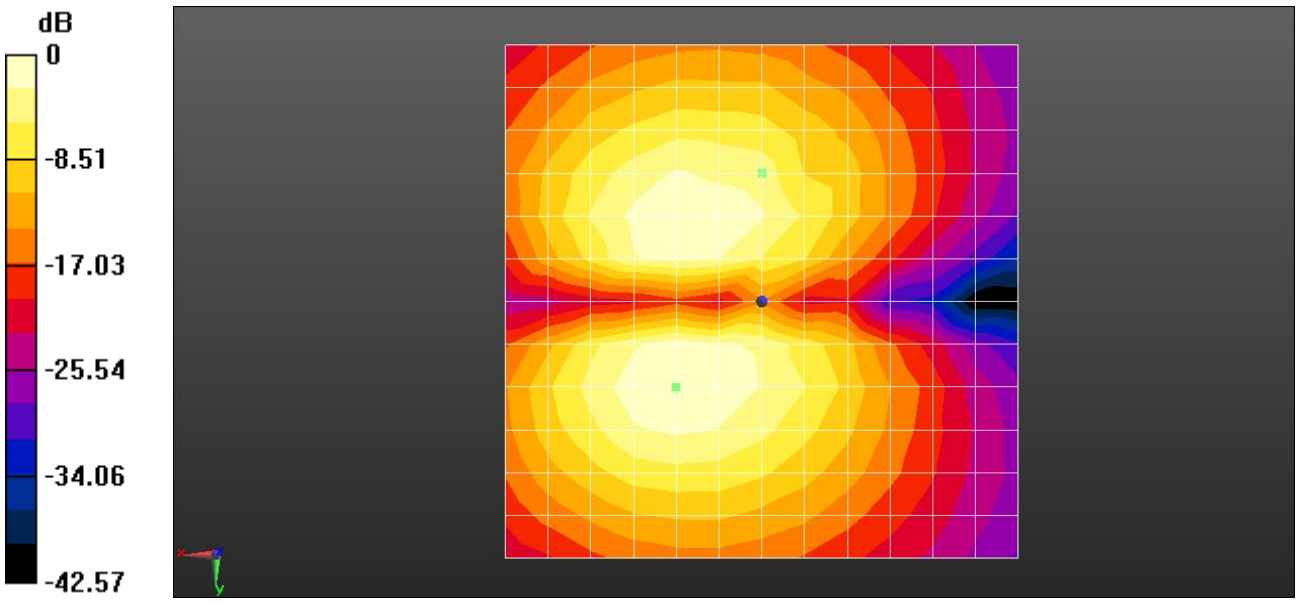
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 38.99 dB
ABM1 comp = 1.01 dBA/m
BWC Factor = 0.13 dB
Location: 0, -12.5, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 5.58 dBA/m
BWC Factor = 0.13 dB
Location: 8.3, 8.3, 3.7 mm



0 dB = 89.06 = 38.99 dB

Date: 2018-2-6

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 GSM1900 661CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-GSM\GPRS\EGPRS-1TS (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 33.69 dB
ABM1 comp = 11.35 dBA/m
BWC Factor = 0.13 dB
Location: 4.2, 0, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

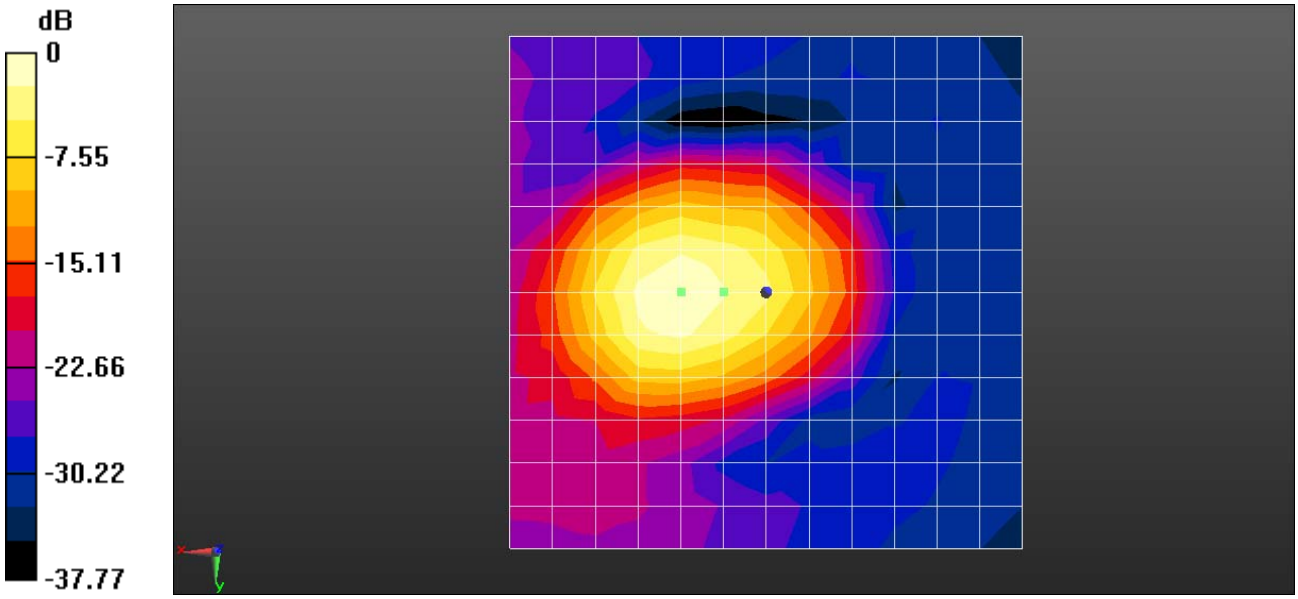
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.04 dBA/m
BWC Factor = 0.13 dB
Location: 8.3, 0, 3.7 mm

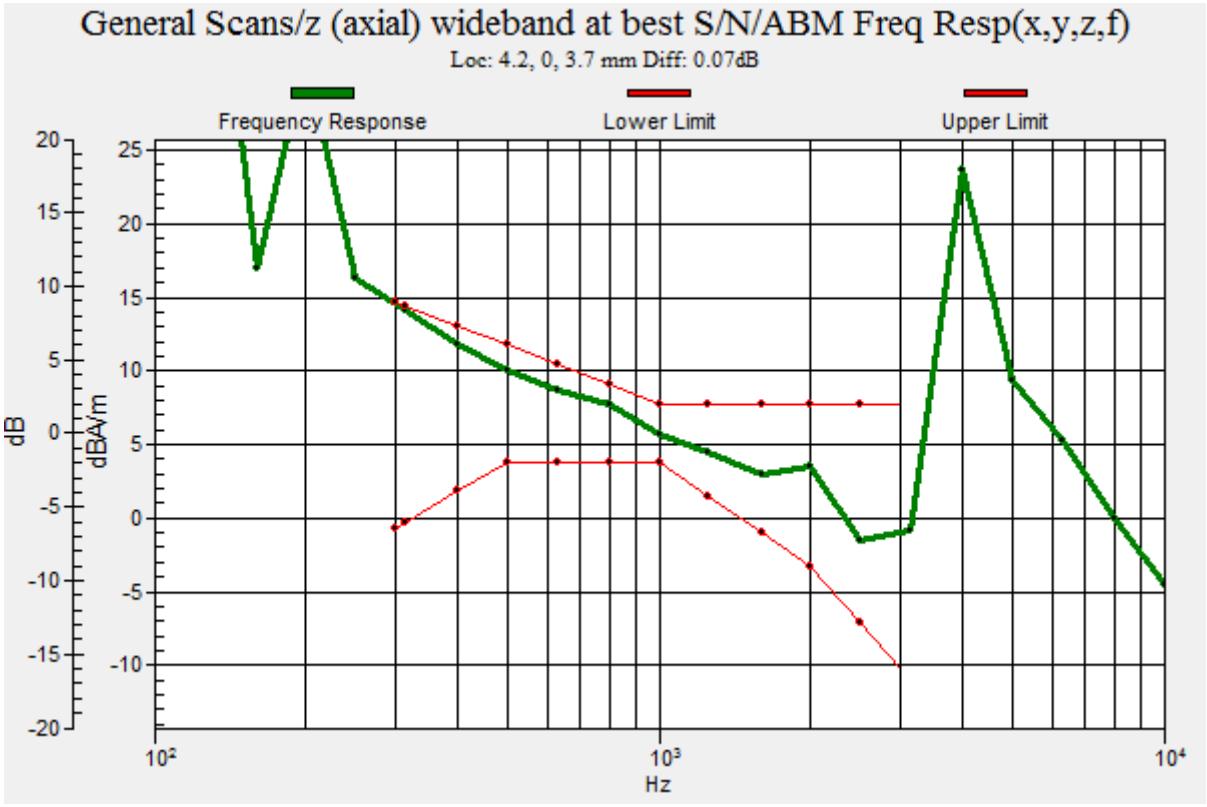
T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial)

wideband at best S/N/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: 100
Measure Window Start: 300ms
Measure Window Length: 2000ms
BWC applied: 10.77 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
Diff = 0.07 dB
BWC Factor = 10.77 dB
Location: 4.2, 0, 3.7 mm



0 dB = 48.39 = 33.70 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, 0, 3.7 mm Diff: 0.07dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
25
20
15
10
5
0
-5
-10
10^2
10^3
10^4

Date: 2018-2-6

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 UMTS Band2 9400CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

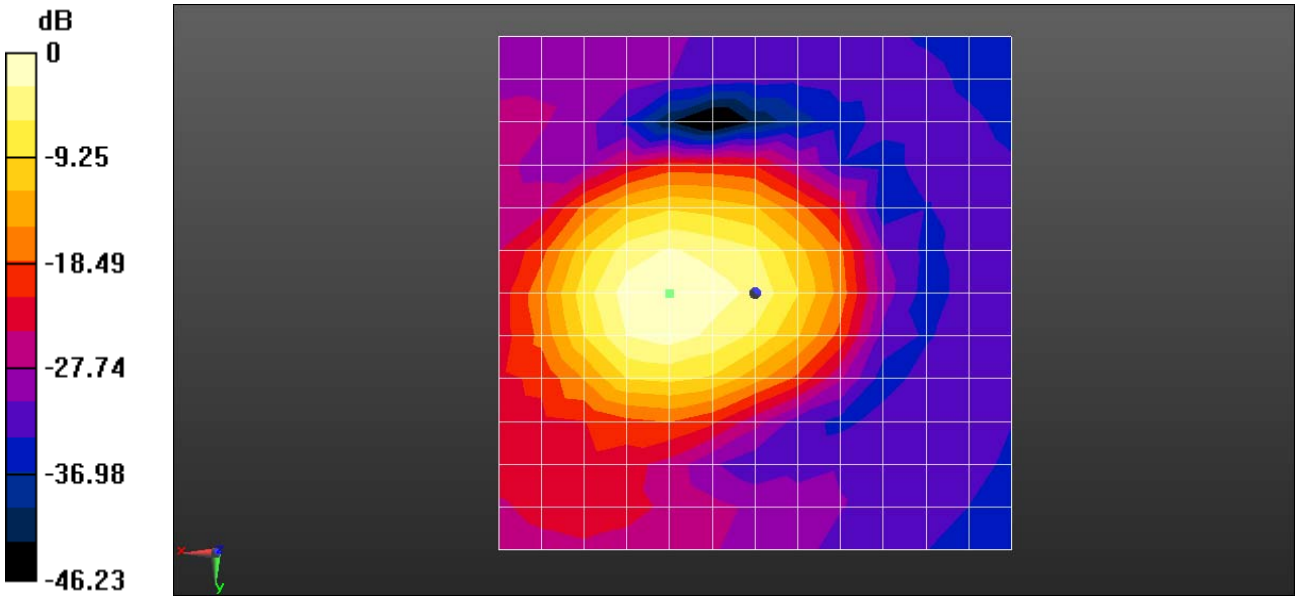
- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 49.56 dB
ABM1 comp = 9.87 dBA/m
BWC Factor = 0.13 dB
Location: 0, 0, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 13.95 dBA/m
BWC Factor = 0.13 dB
Location: 8.3, 0, 3.7 mm



0 dB = 300.6 = 49.56 dB

Date: 2018-2-6

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 UMTS Band2 9400CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

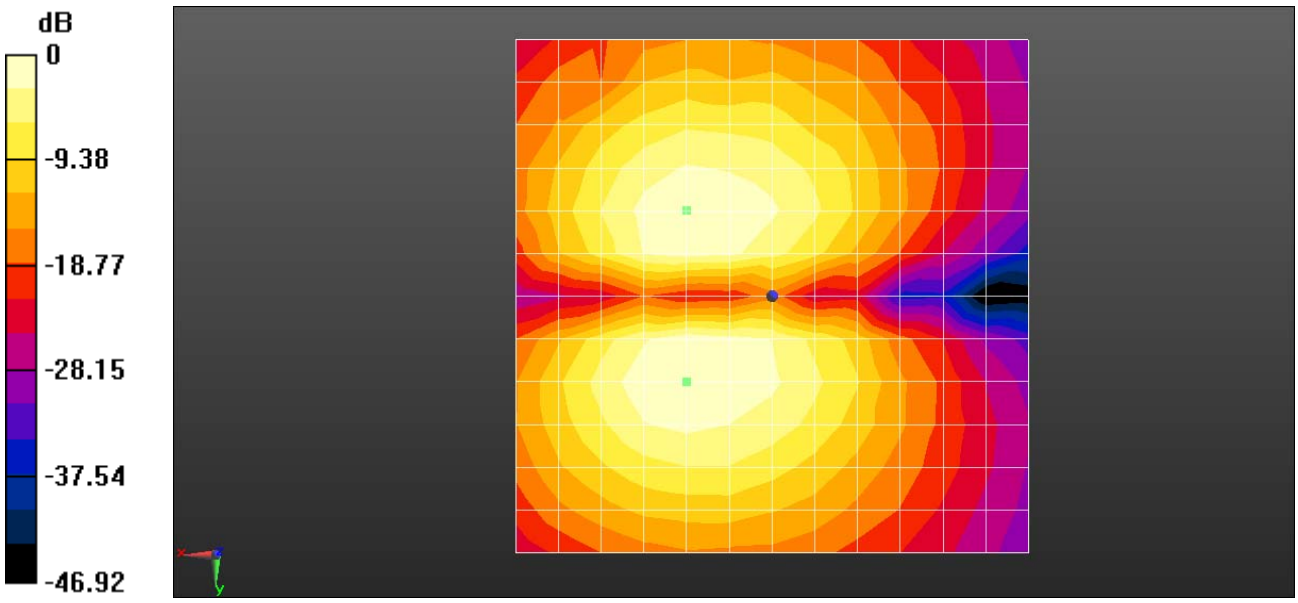
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 48.61 dB
ABM1 comp = 5.43 dBA/m
BWC Factor = 0.13 dB
Location: 8.3, -8.3, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 5.85 dBA/m
BWC Factor = 0.13 dB
Location: 8.3, 8.3, 3.7 mm



0 dB = 269.6 = 48.61 dB

Date: 2018-2-6

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 UMTS Band2 9400CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 49.56 dB
ABM1 comp = 9.87 dBA/m
BWC Factor = 0.13 dB
Location: 0, 0, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

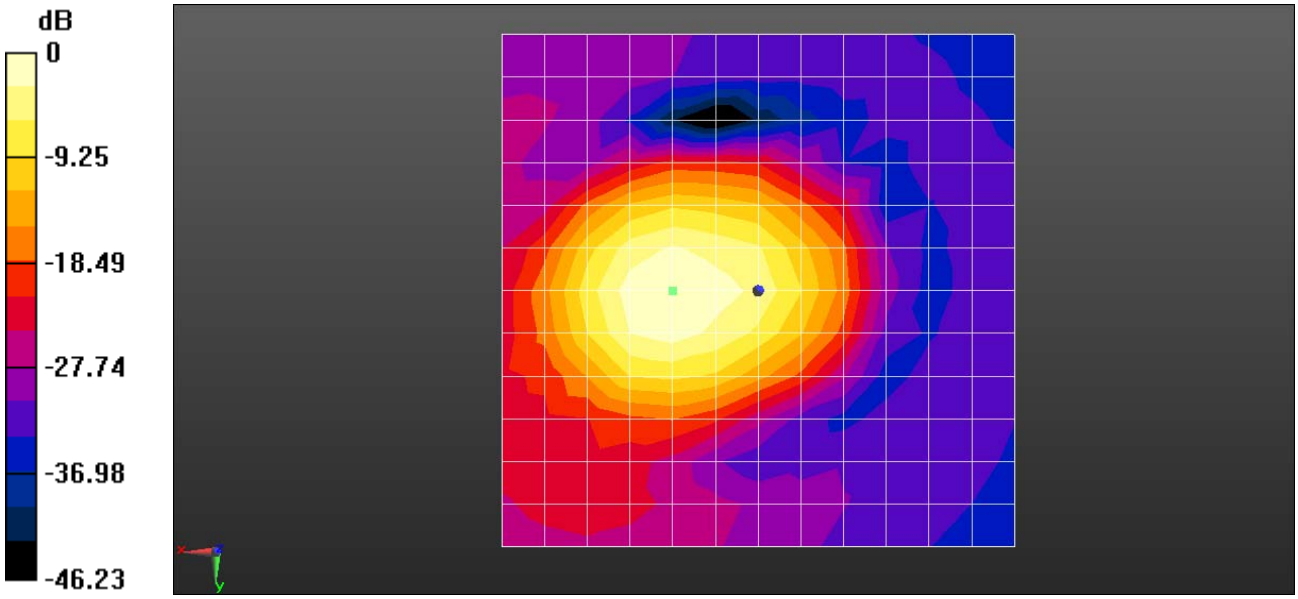
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 13.95 dBA/m
BWC Factor = 0.13 dB
Location: 8.3, 0, 3.7 mm

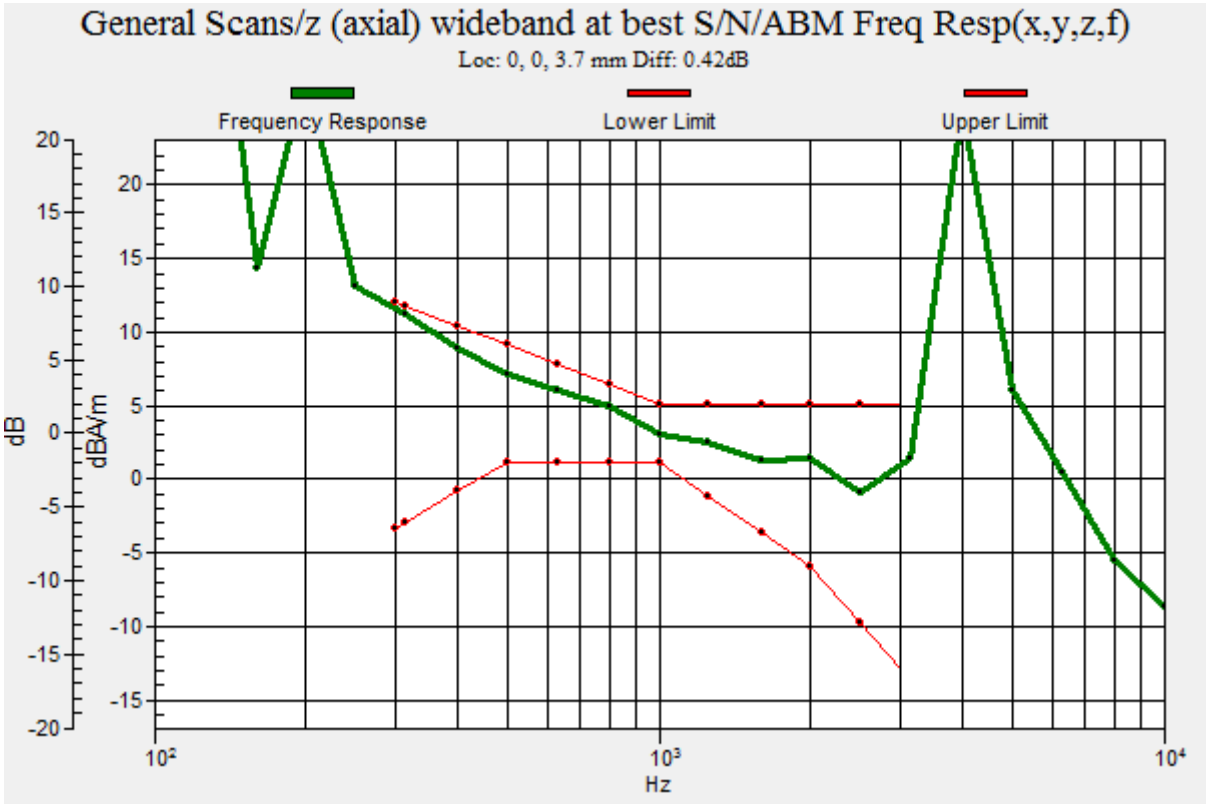
T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial)

wideband at best S/N/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: 100
Measure Window Start: 300ms
Measure Window Length: 2000ms
BWC applied: 10.77 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
Diff = 0.42 dB
BWC Factor = 10.77 dB
Location: 0, 0, 3.7 mm



0 dB = 300.6 = 49.56 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 0, 0, 3.7 mm Diff: 0.42dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4

Date: 2018-2-6

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 UMTS Band 4 1413CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

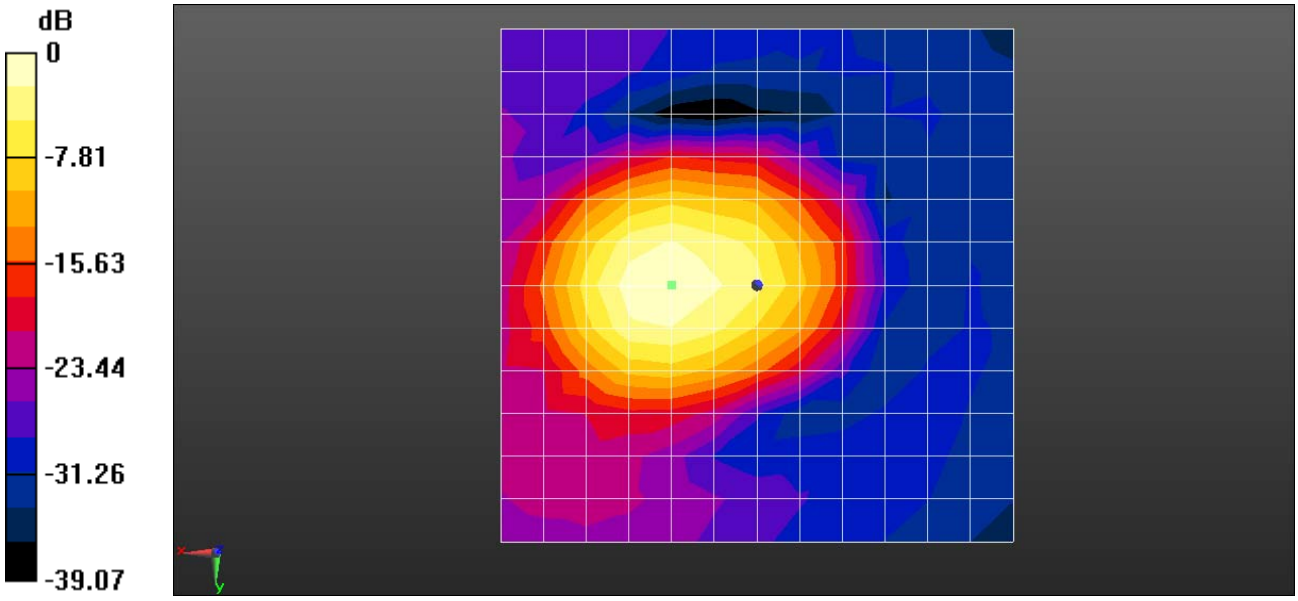
- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 52.63 dB
ABM1 comp = 9.44 dBA/m
BWC Factor = 0.13 dB
Location: 0, 0, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.37 dBA/m
BWC Factor = 0.13 dB
Location: 8.3, 0, 3.7 mm



0 dB = 428.2 = 52.63 dB

Date: 2018-2-6

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 UMTS Band 4 1413CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

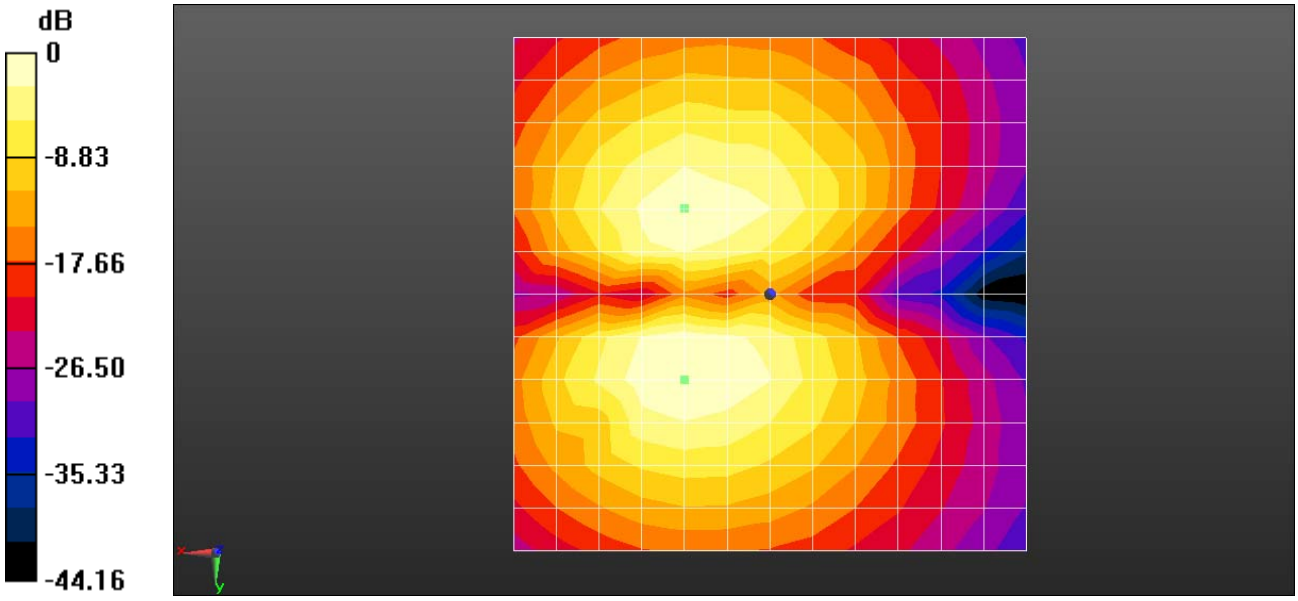
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 51.13 dB
ABM1 comp = 5.67 dBA/m
BWC Factor = 0.13 dB
Location: 8.3, -8.3, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 6.39 dBA/m
BWC Factor = 0.13 dB
Location: 8.3, 8.3, 3.7 mm



0 dB = 360.0 = 51.13 dB

Date: 2018-2-6

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 UMTS Band 4 1413CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 52.63 dB
ABM1 comp = 9.44 dBA/m
BWC Factor = 0.13 dB
Location: 0, 0, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

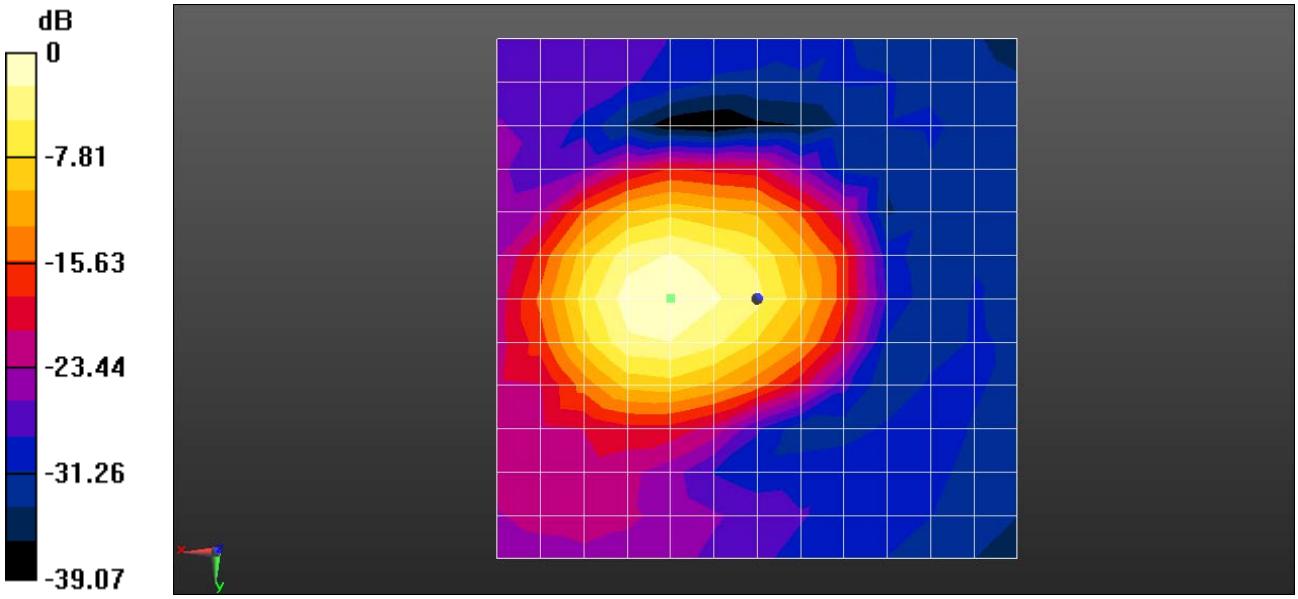
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.13 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.37 dBA/m
BWC Factor = 0.13 dB
Location: 8.3, 0, 3.7 mm

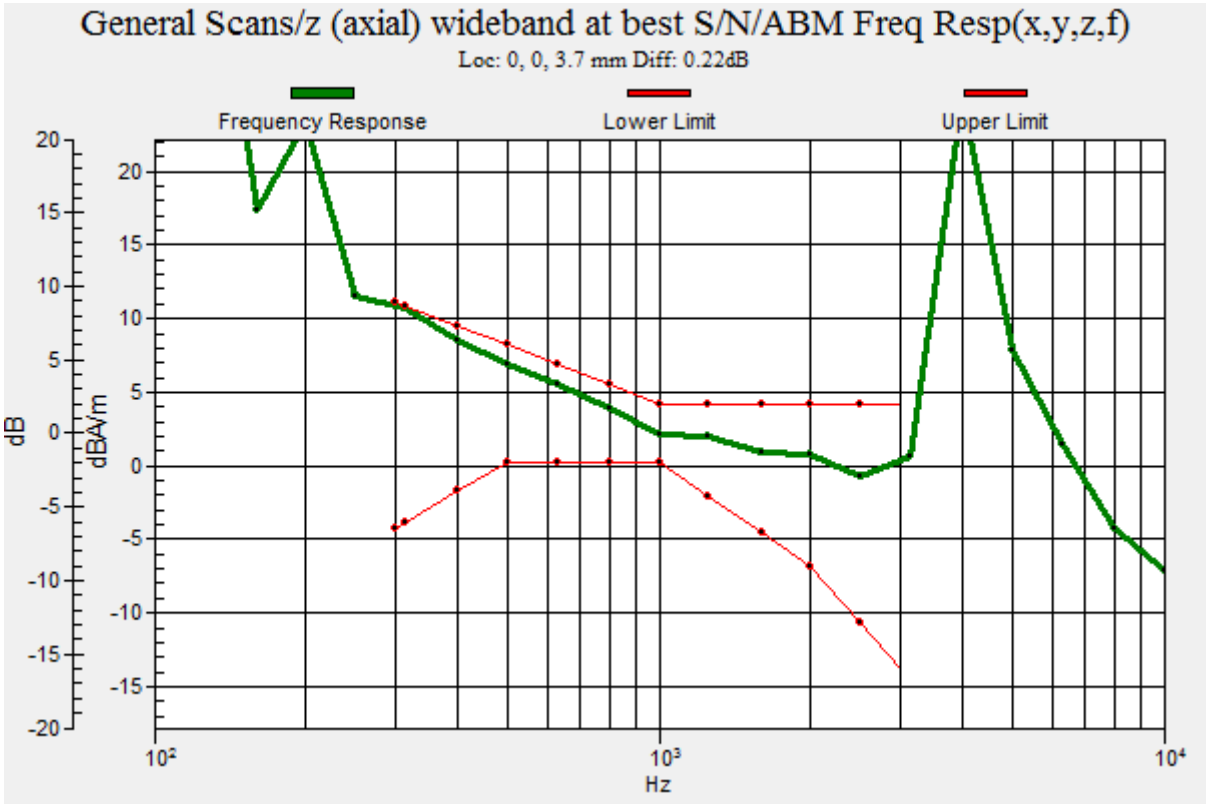
T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial)

wideband at best S/N/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: 100
Measure Window Start: 300ms
Measure Window Length: 2000ms
BWC applied: 10.77 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
Diff = 0.22 dB
BWC Factor = 10.77 dB
Location: 0, 0, 3.7 mm



0 dB = 428.2 = 52.63 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 0, 0, 3.7 mm Diff: 0.22dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
10²
10³
10⁴

Date: 2018-2-10

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 UMTS Band 5 4182CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

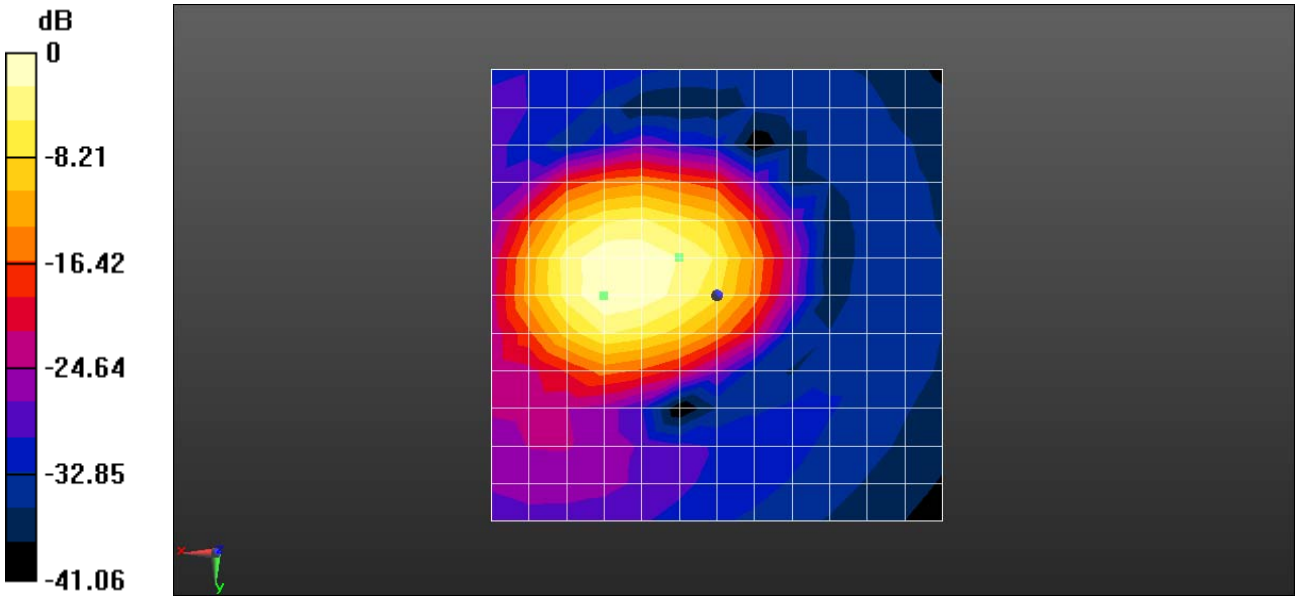
- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.06 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 56.29 dB
ABM1 comp = 11.05 dBA/m
BWC Factor = 0.06 dB
Location: 4.2, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.06 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 13.95 dBA/m
BWC Factor = 0.06 dB
Location: 12.5, 0, 3.7 mm



0 dB = 652.2 = 56.29 dB

Date: 2018-2-10

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 UMTS Band 5 4182CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

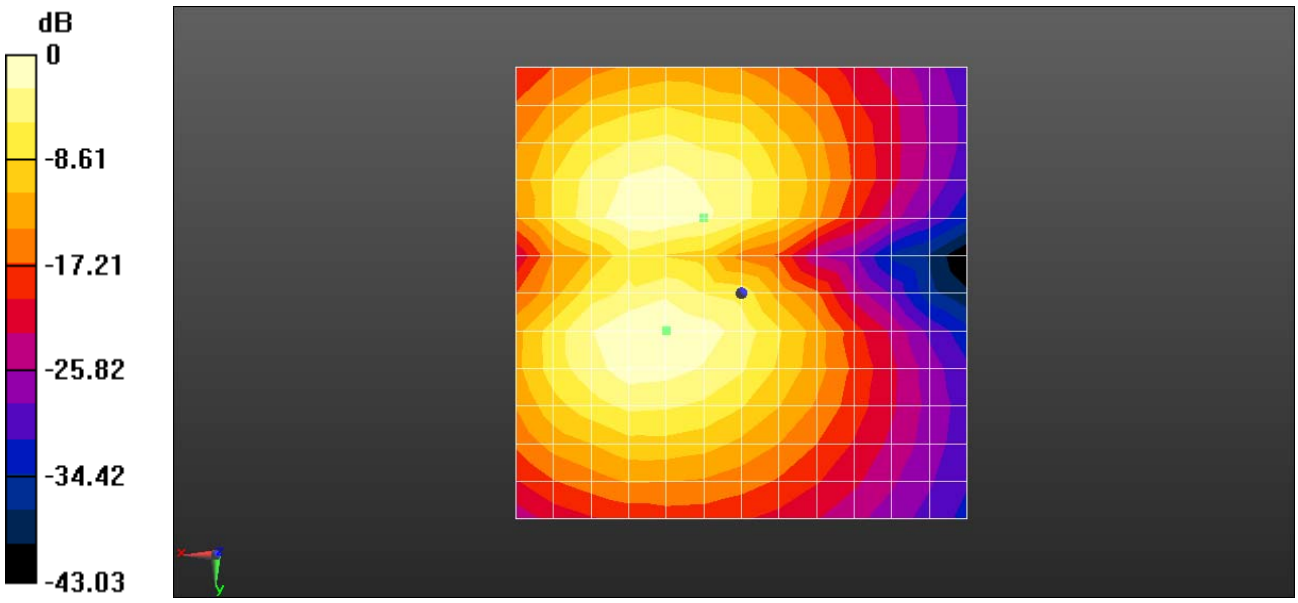
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.06 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 55.29 dB
ABM1 comp = 4.48 dBA/m
BWC Factor = 0.06 dB
Location: 4.2, -8.3, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.06 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 7.13 dBA/m
BWC Factor = 0.06 dB
Location: 8.3, 4.2, 3.7 mm



0 dB = 581.3 = 55.29 dB

Date: 2018-2-10

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 UMTS Band 5 4182CH with Battery1-Main Antenna

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, HW-UMTS-FDD(WCDMA) (0); Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.06 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 56.29 dB
ABM1 comp = 11.05 dBA/m
BWC Factor = 0.06 dB
Location: 4.2, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

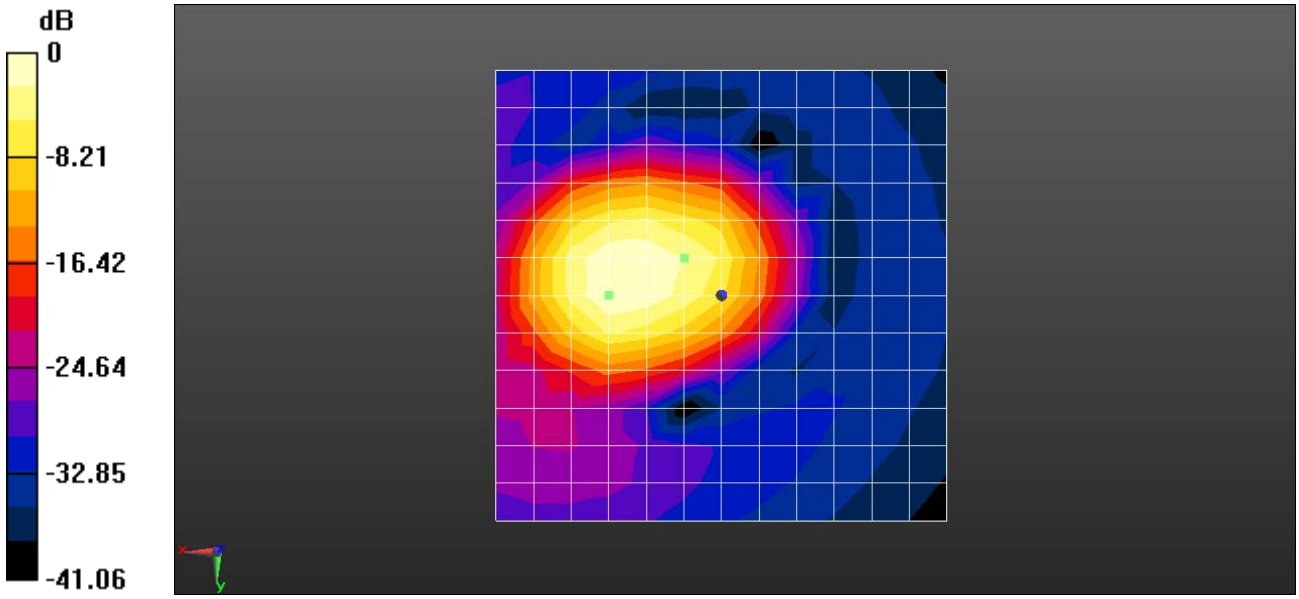
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.06 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 13.95 dBA/m
BWC Factor = 0.06 dB
Location: 12.5, 0, 3.7 mm

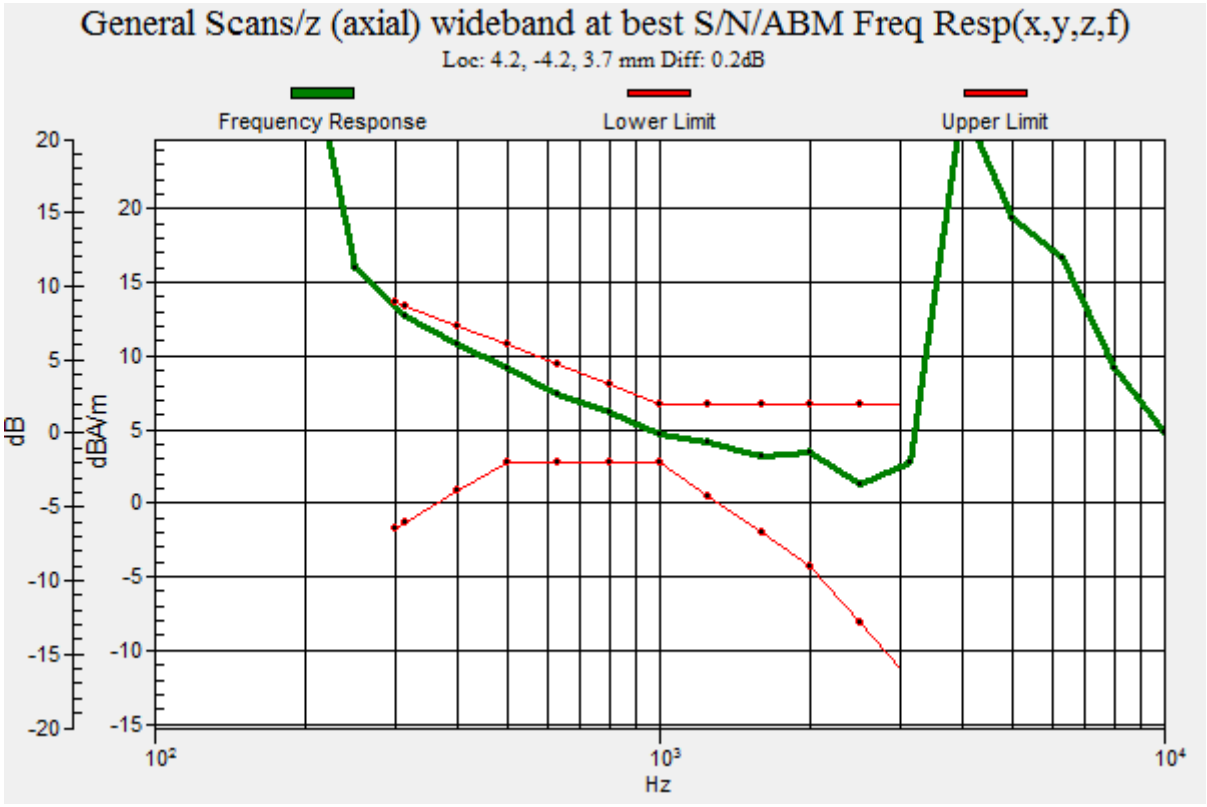
T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial)

wideband at best S/N/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: 100
Measure Window Start: 300ms
Measure Window Length: 2000ms
BWC applied: 10.69 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
Diff = 0.20 dB
BWC Factor = 10.69 dB
Location: 4.2, -4.2, 3.7 mm



0 dB = 652.2 = 56.29 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -4.2, 3.7 mm Diff: 0.2dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4

Date: 2018-2-7

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 2 23.85k QPSK 20M 50%RB 25 Offset 18900CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

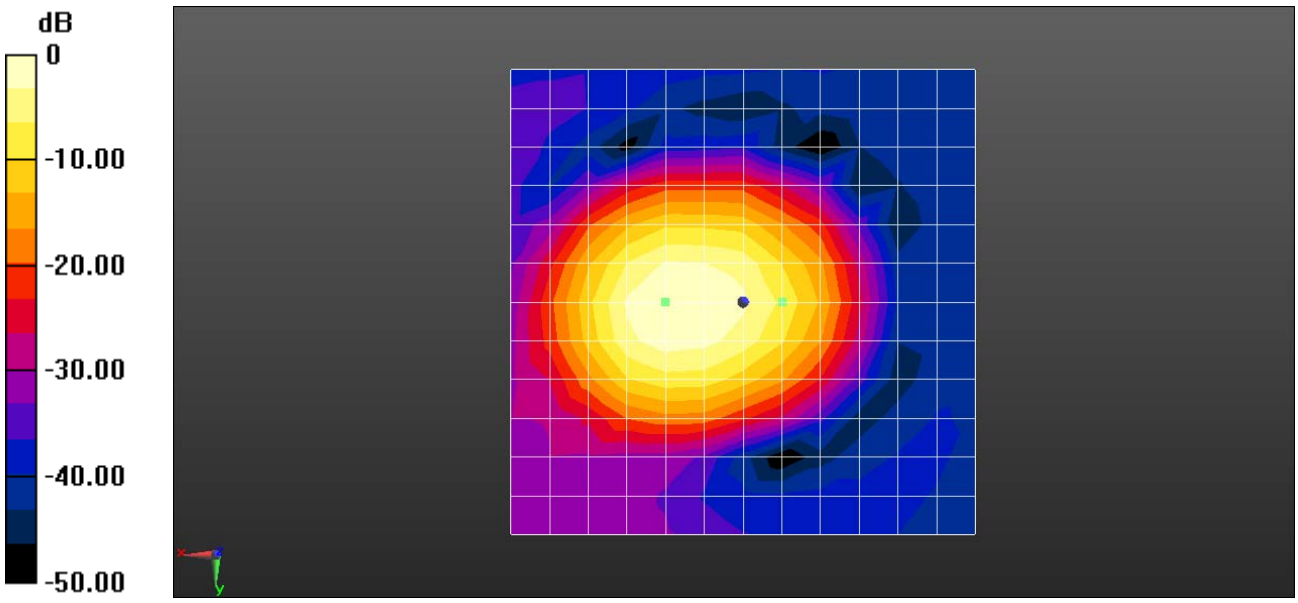
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.14 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 45.11 dB
ABM1 comp = 5.38 dBA/m
BWC Factor = 0.14 dB
Location: -4.2, 0, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.14 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 11.66 dBA/m
BWC Factor = 0.14 dB
Location: 8.3, 0, 3.7 mm



0 dB = 180.1 = 45.11 dB

Date: 2018-2-7

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 2 23.85k QPSK 20M 50%RB 25 Offset 18900CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

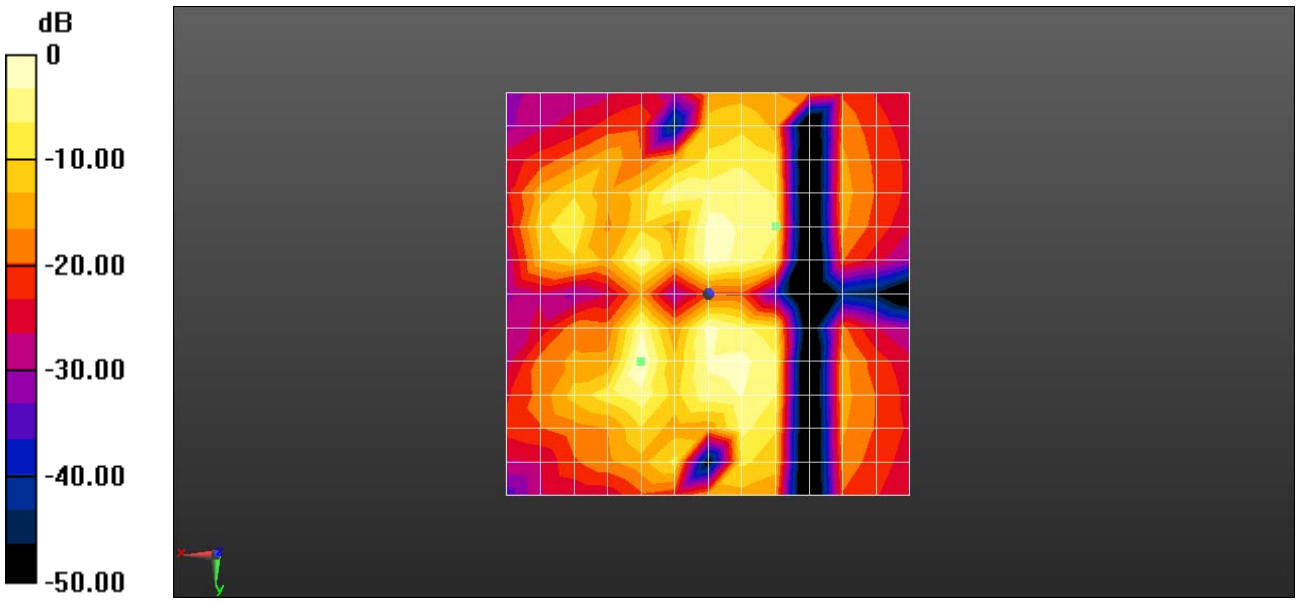
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.14 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 47.38 dB
ABM1 comp = -3.41 dBA/m
BWC Factor = 0.14 dB
Location: -8.3, -8.3, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.14 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 2.42 dBA/m
BWC Factor = 0.14 dB
Location: 8.3, 8.3, 3.7 mm



0 dB = 234.0 = 47.38 dB

Date: 2018-2-7

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 2 23.85k QPSK 20M 50%RB 25 Offset 18900CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.14 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 45.11 dB
ABM1 comp = 5.38 dBA/m
BWC Factor = 0.14 dB
Location: -4.2, 0, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

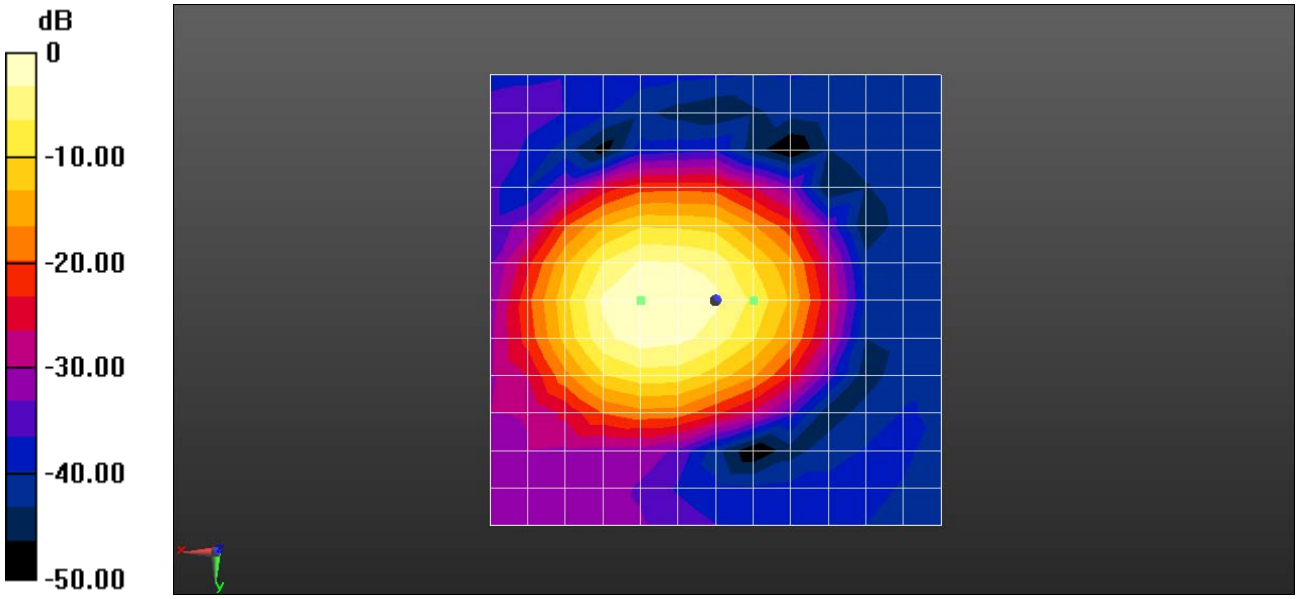
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.14 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 11.66 dBA/m
BWC Factor = 0.14 dB
Location: 8.3, 0, 3.7 mm

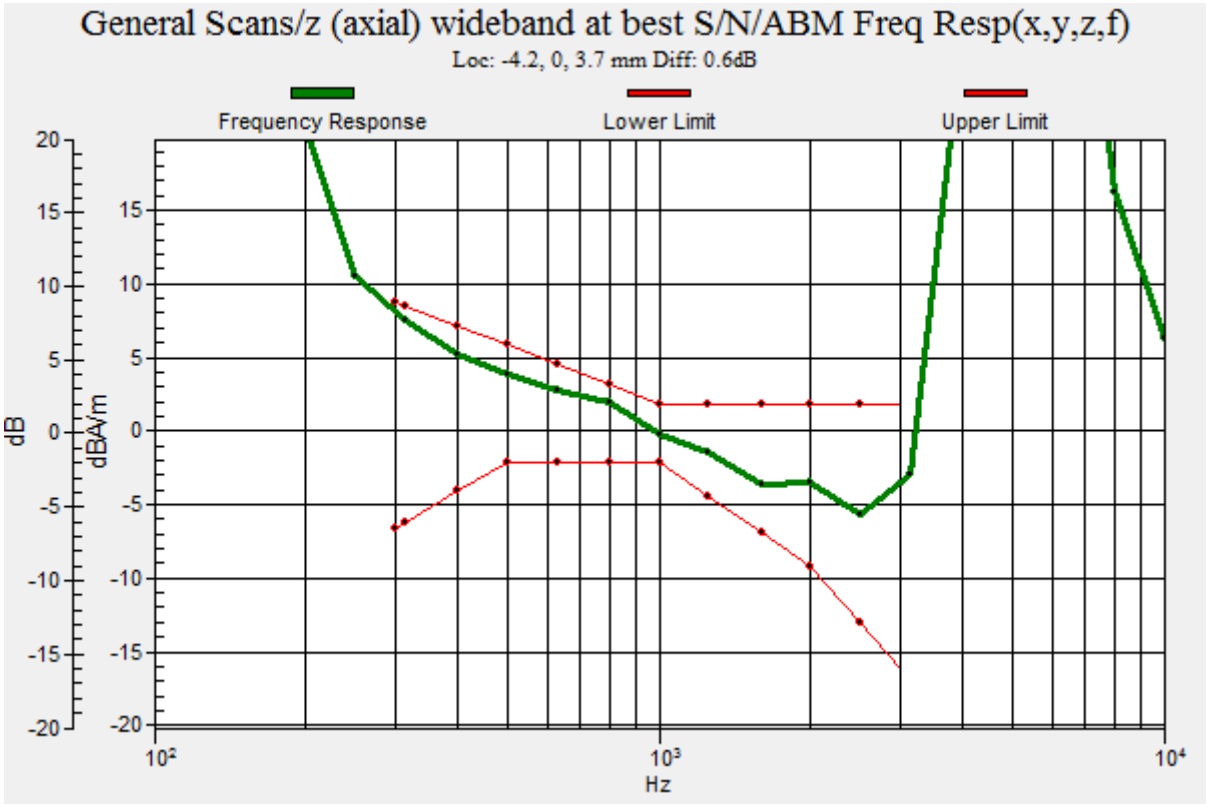
T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial)

wideband at best S/N/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: 100
Measure Window Start: 300ms
Measure Window Length: 2000ms
BWC applied: 10.78 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
Diff = 0.60 dB
BWC Factor = 10.78 dB
Location: -4.2, 0, 3.7 mm



0 dB = 180.1 = 45.11 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: -4.2, 0, 3.7 mm Diff: 0.6dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 4 23.85k QPSK 20M 50%RB 25 Offset 20175CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

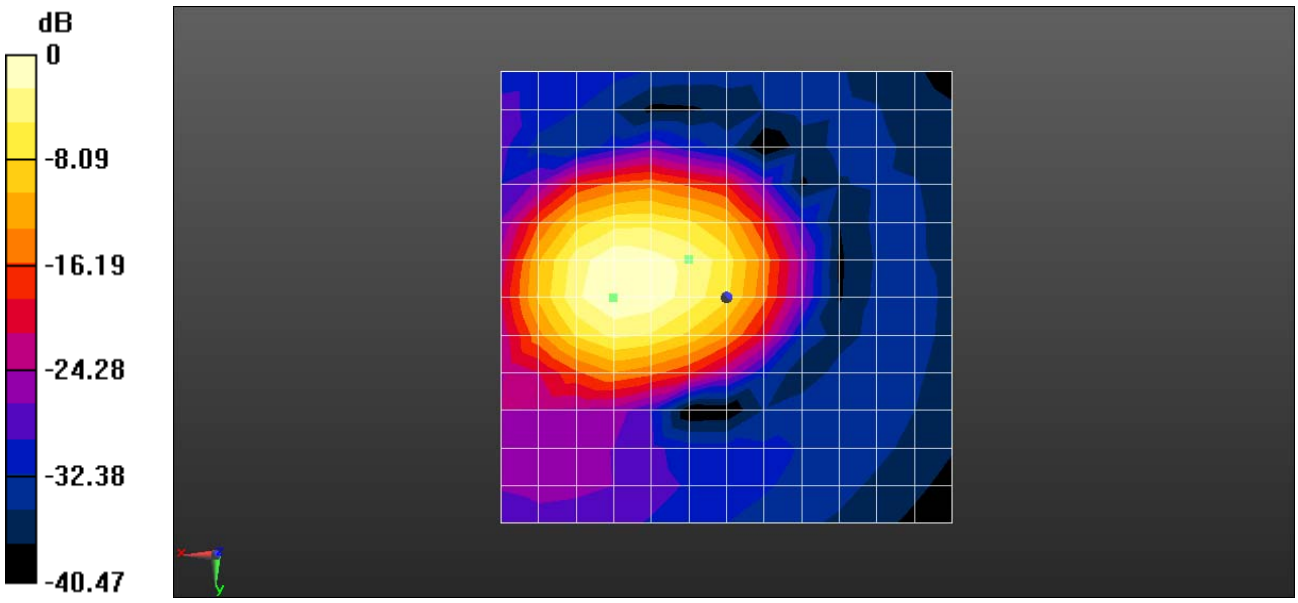
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 53.61 dB
ABM1 comp = 11.21 dBA/m
BWC Factor = 0.15 dB
Location: 4.2, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.66 dBA/m
BWC Factor = 0.15 dB
Location: 12.5, 0, 3.7 mm



0 dB = 479.0 = 53.61 dB

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 4 23.85k QPSK 20M 50%RB 25 Offset 20175CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

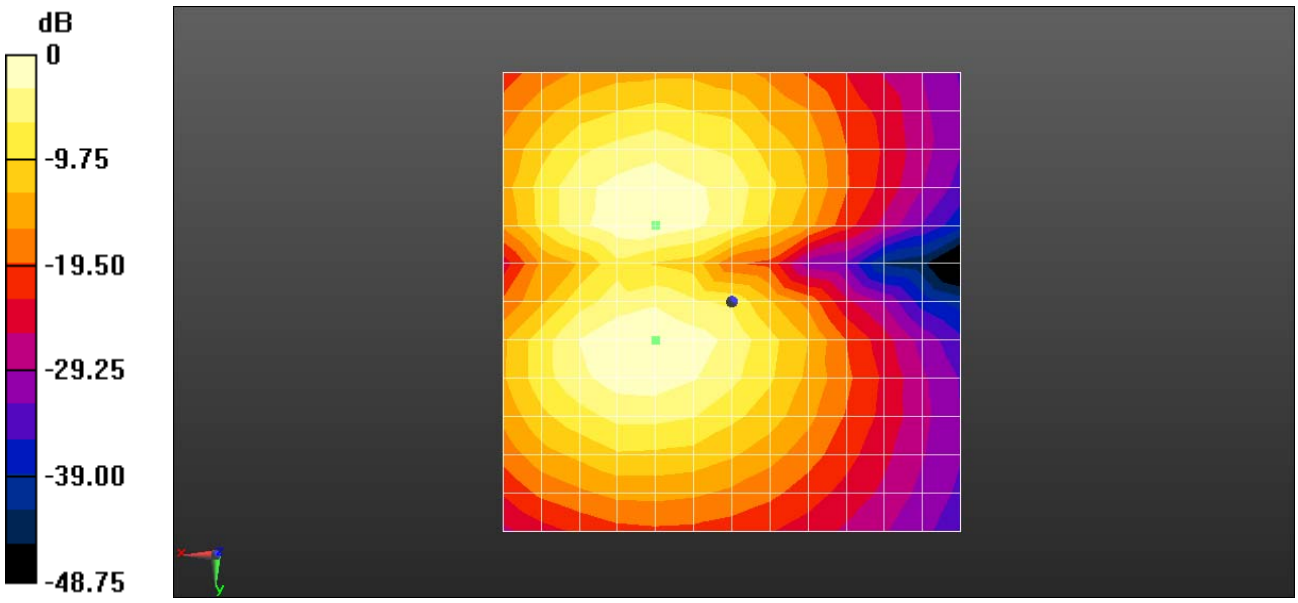
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 54.00 dB
ABM1 comp = 6.83 dBA/m
BWC Factor = 0.15 dB
Location: 8.3, -8.3, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 7.56 dBA/m
BWC Factor = 0.15 dB
Location: 8.3, 4.2, 3.7 mm



0 dB = 501.4 = 54.00 dB

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 4 23.85k QPSK 20M 50%RB 25 Offset 20175CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 53.61 dB
ABM1 comp = 11.21 dBA/m
BWC Factor = 0.15 dB
Location: 4.2, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

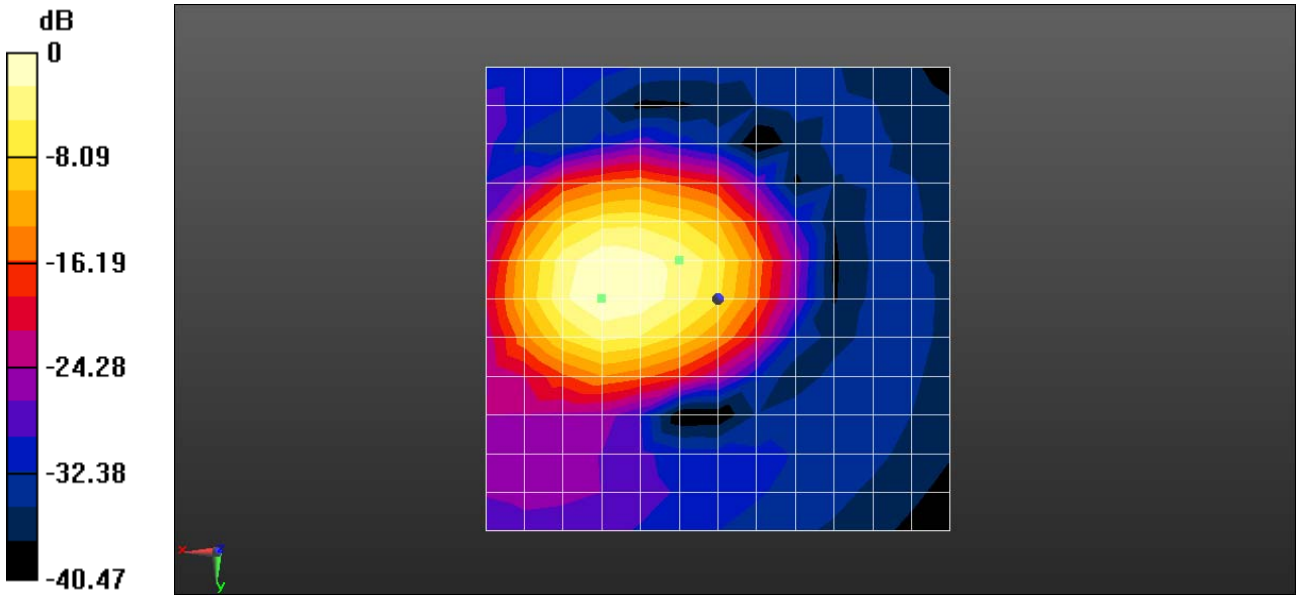
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.66 dBA/m
BWC Factor = 0.15 dB
Location: 12.5, 0, 3.7 mm

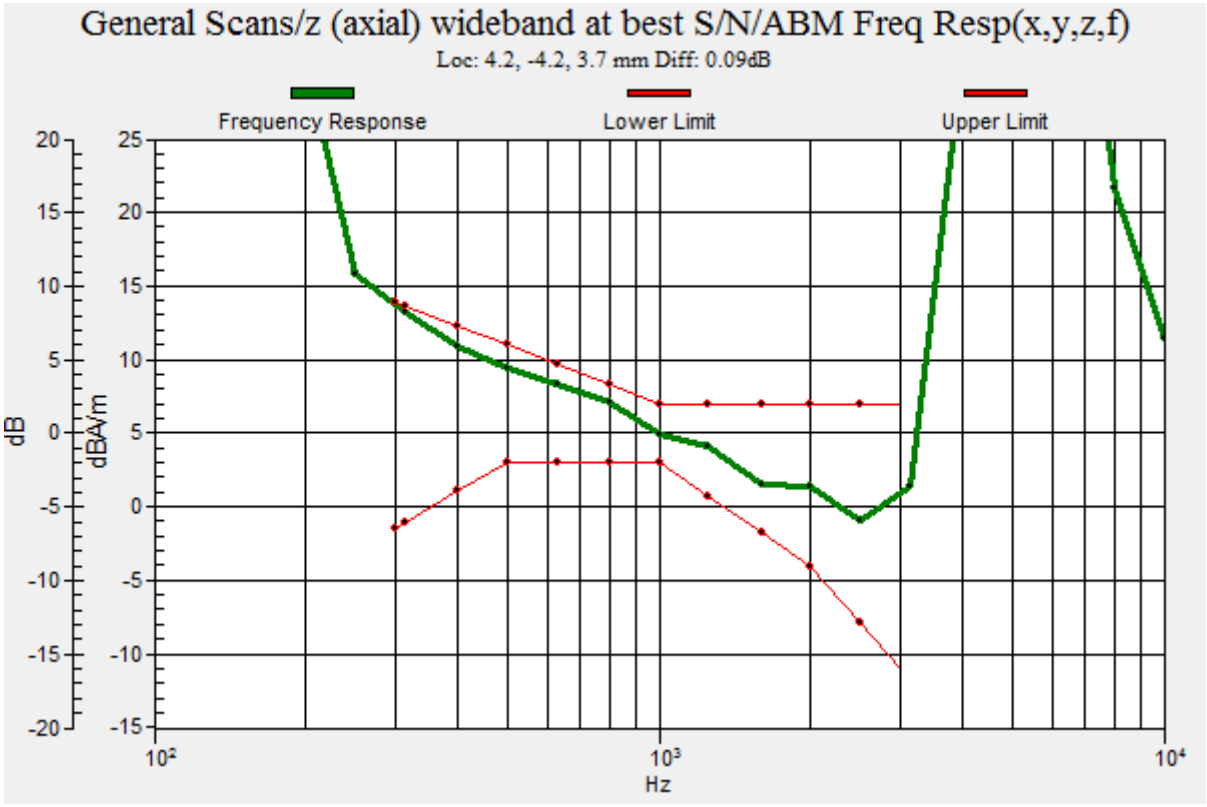
T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial)

wideband at best S/N/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: 100
Measure Window Start: 300ms
Measure Window Length: 2000ms
BWC applied: 10.78 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
Diff = 0.09 dB
BWC Factor = 10.78 dB
Location: 4.2, -4.2, 3.7 mm



0 dB = 479.0 = 53.61 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -4.2, 3.7 mm Diff: 0.09dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
25
20
15
10
5
0
-5
-10
-15
10²
10³
10⁴

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 5 23.85k QPSK 10M 50%RB 13 Offset 20525CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

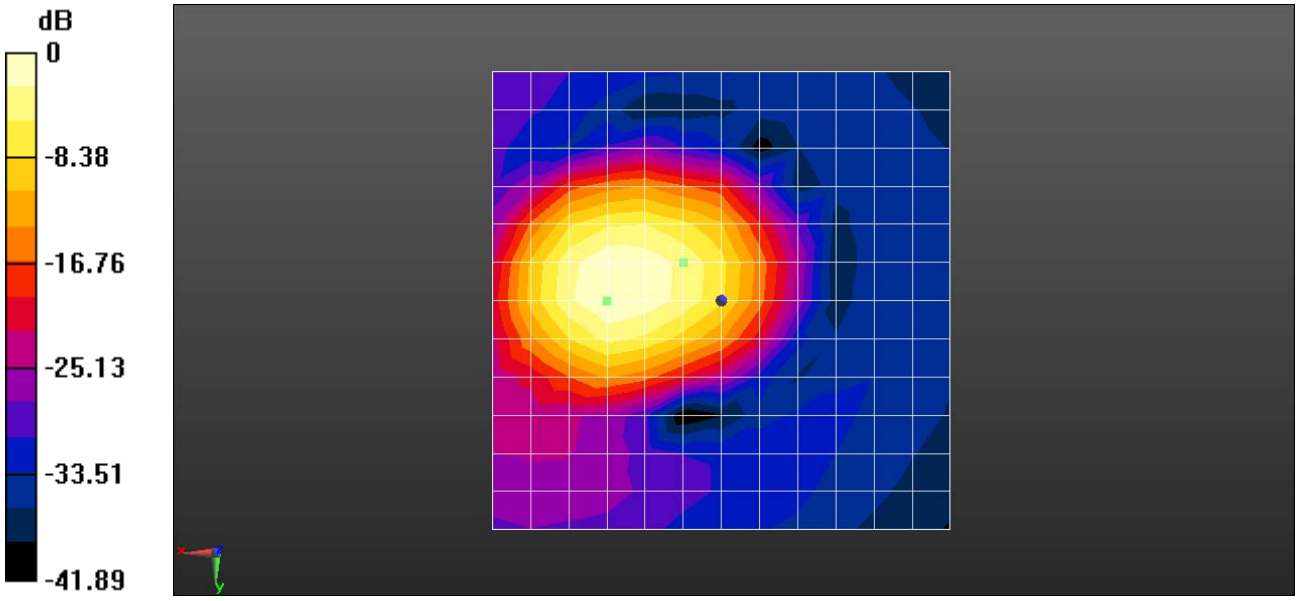
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 54.06 dB
ABM1 comp = 11.11 dBA/m
BWC Factor = 0.15 dB
Location: 4.2, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.71 dBA/m
BWC Factor = 0.15 dB
Location: 12.5, 0, 3.7 mm



0 dB = 504.5 = 54.06 dB

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 5 23.85k QPSK 10M 50%RB 13 Offset 20525CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

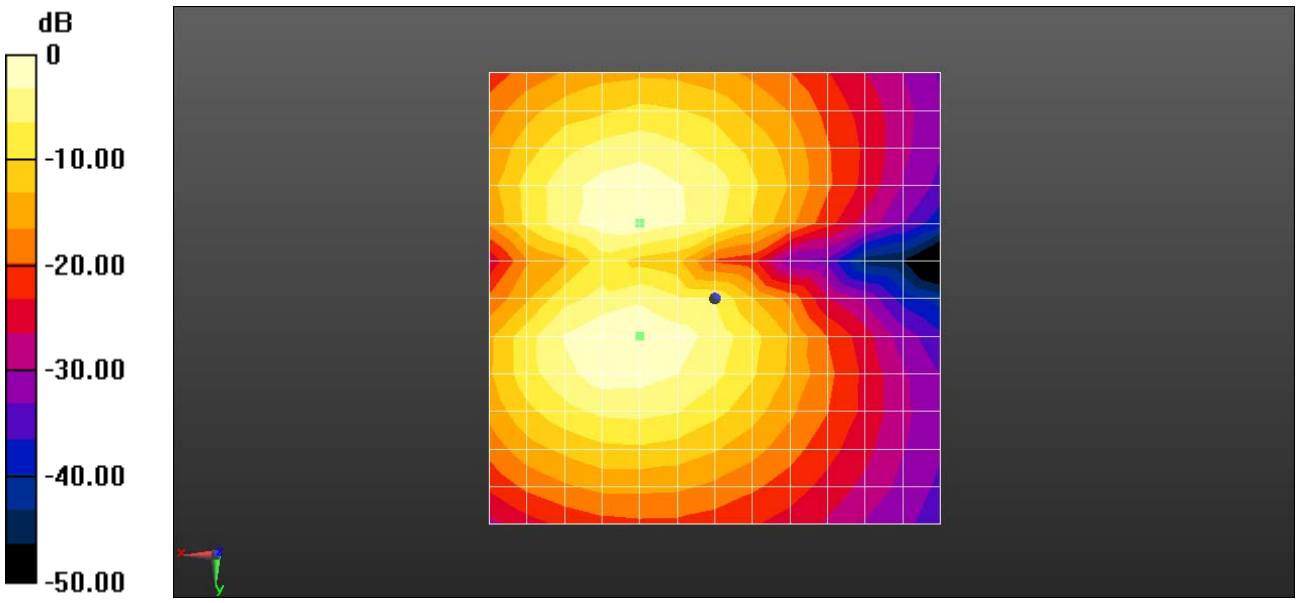
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 53.02 dB
ABM1 comp = 6.46 dBA/m
BWC Factor = 0.15 dB
Location: 8.3, -8.3, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 7.51 dBA/m
BWC Factor = 0.15 dB
Location: 8.3, 4.2, 3.7 mm



0 dB = 447.7 = 53.02 dB

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 5 23.85k QPSK 10M 50%RB 13 Offset 20525CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 54.06 dB
ABM1 comp = 11.11 dBA/m
BWC Factor = 0.15 dB
Location: 4.2, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

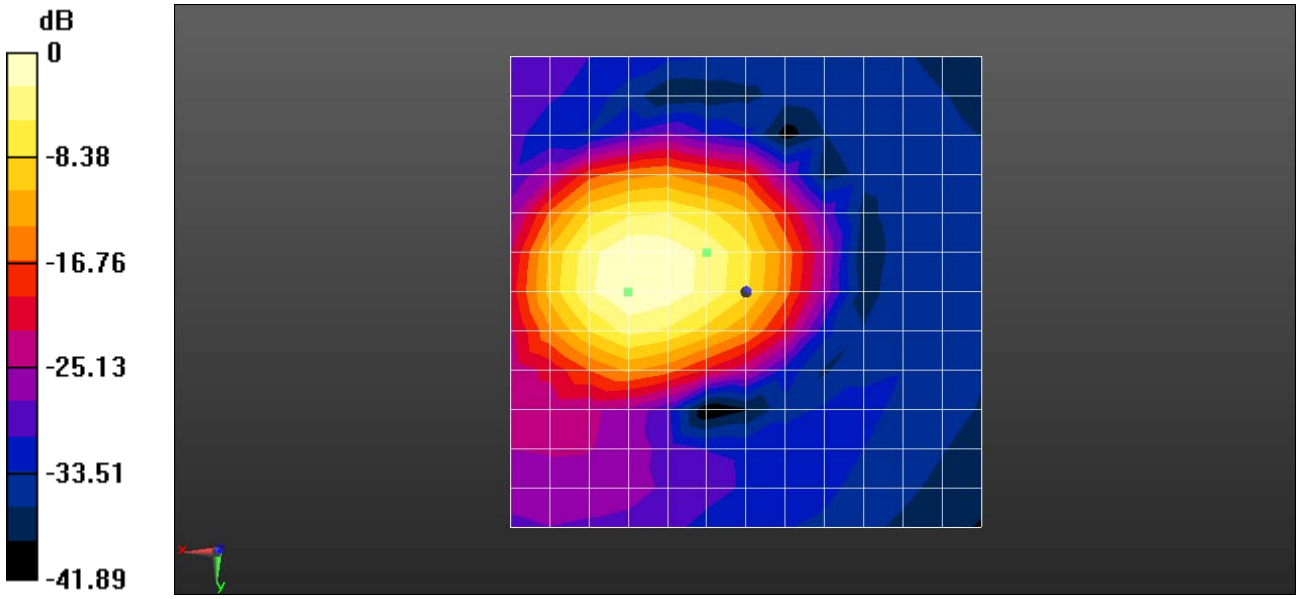
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.71 dBA/m
BWC Factor = 0.15 dB
Location: 12.5, 0, 3.7 mm

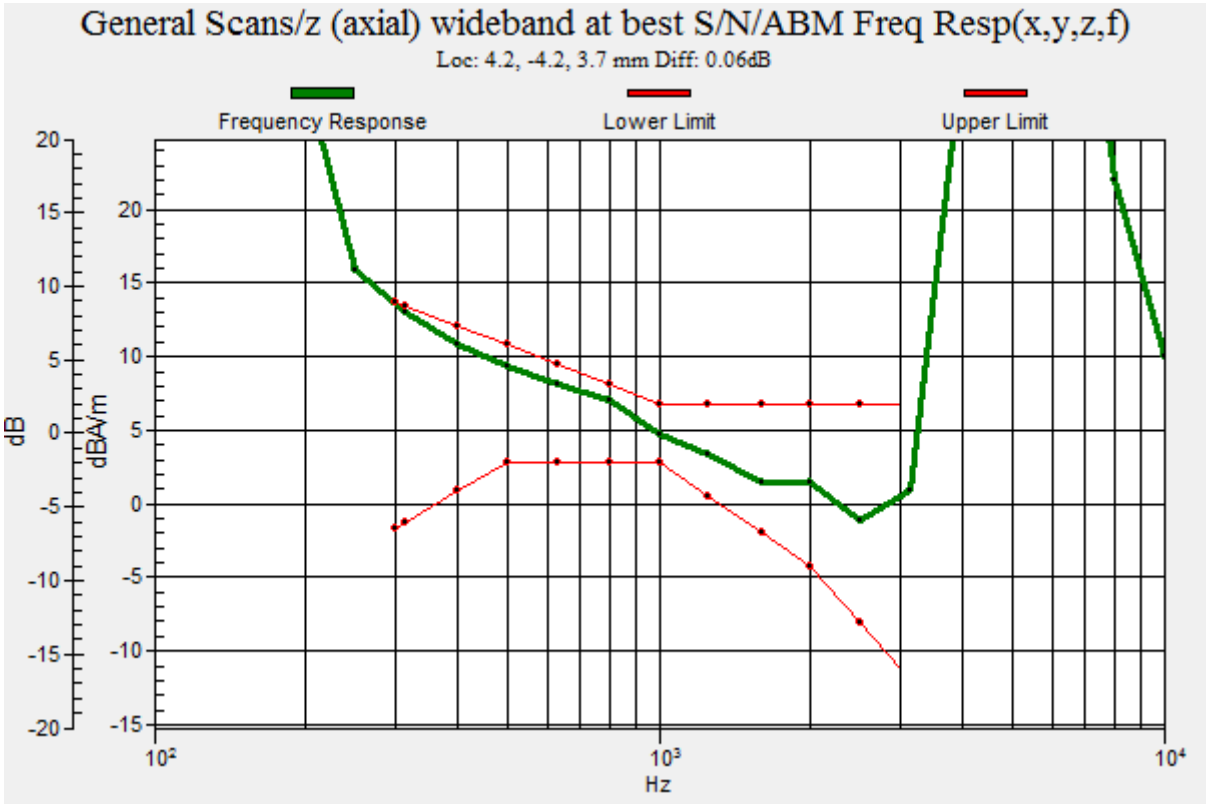
T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial)

wideband at best S/N/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: 100
Measure Window Start: 300ms
Measure Window Length: 2000ms
BWC applied: 10.78 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
Diff = 0.06 dB
BWC Factor = 10.78 dB
Location: 4.2, -4.2, 3.7 mm



0 dB = 504.5 = 54.06 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -4.2, 3.7 mm Diff: 0.06dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 7 23.85k QPSK 20M 50%RB 25 Offset 21100CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

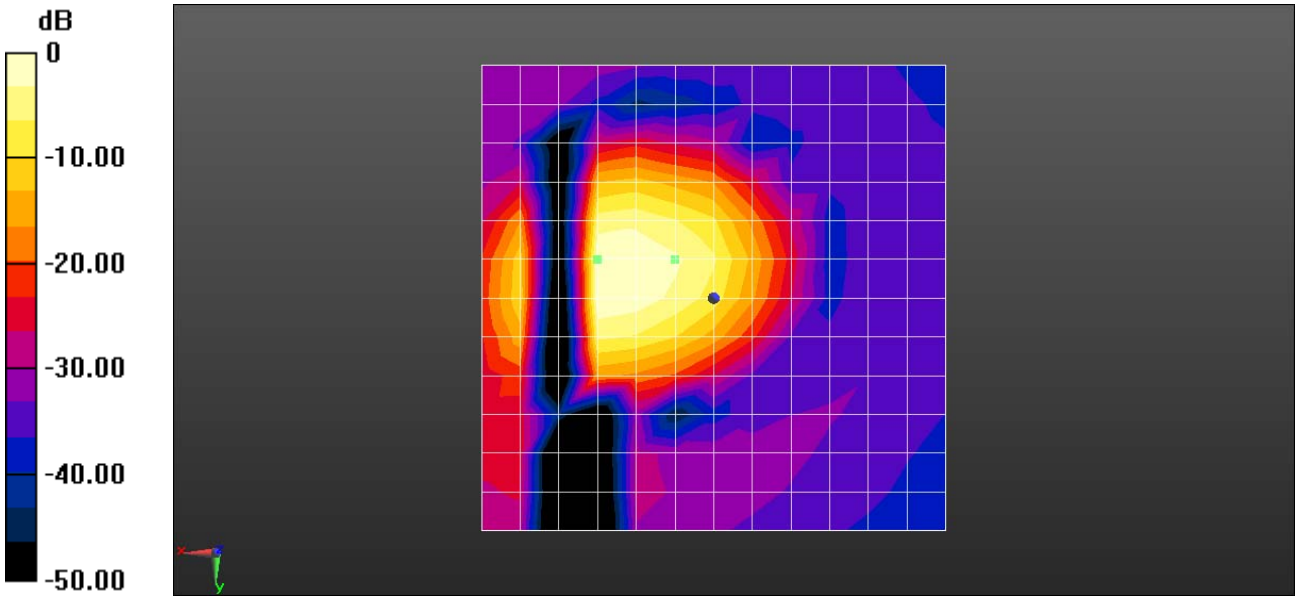
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 54.13 dB
ABM1 comp = 11.66 dBA/m
BWC Factor = 0.15 dB
Location: 4.2, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.27 dBA/m
BWC Factor = 0.15 dB
Location: 12.5, -4.2, 3.7 mm



0 dB = 508.5 = 54.13 dB

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 7 23.85k QPSK 20M 50%RB 25 Offset 21100CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

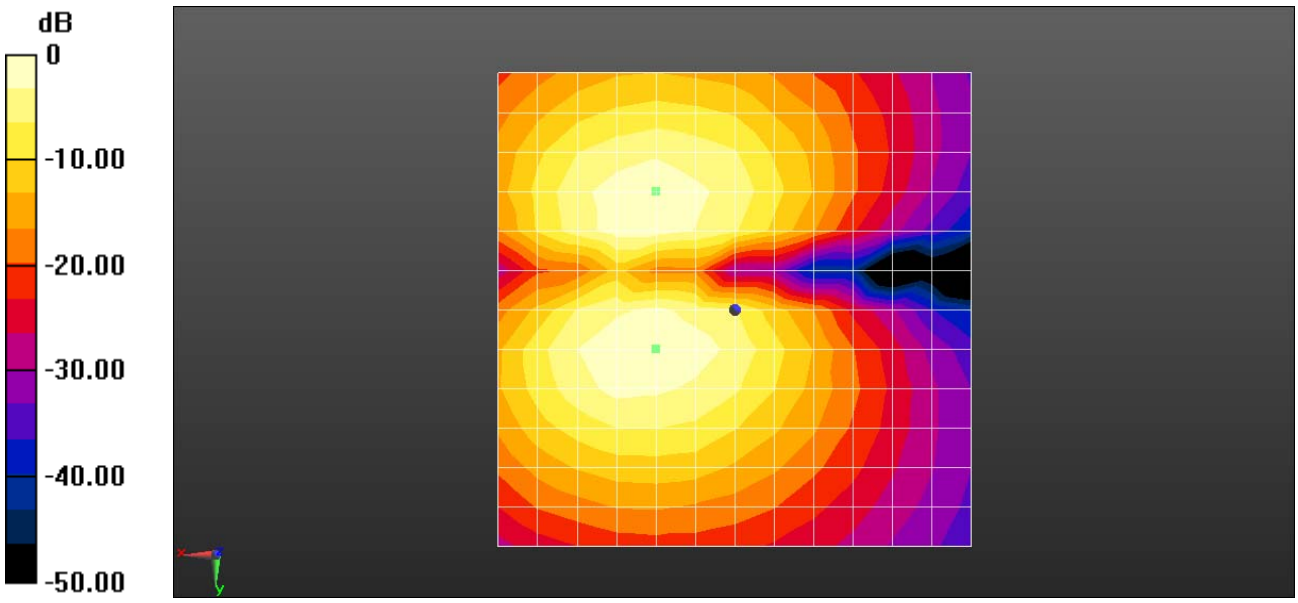
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 53.98 dB
ABM1 comp = 6.21 dBA/m
BWC Factor = 0.15 dB
Location: 8.3, -12.5, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 7.44 dBA/m
BWC Factor = 0.15 dB
Location: 8.3, 4.2, 3.7 mm



0 dB = 500.2 = 53.98 dB

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 7 23.85k QPSK 20M 50%RB 25 Offset 21100CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 20MHz, QPSK/16-QAM) (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 54.13 dB
ABM1 comp = 11.66 dBA/m
BWC Factor = 0.15 dB
Location: 4.2, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

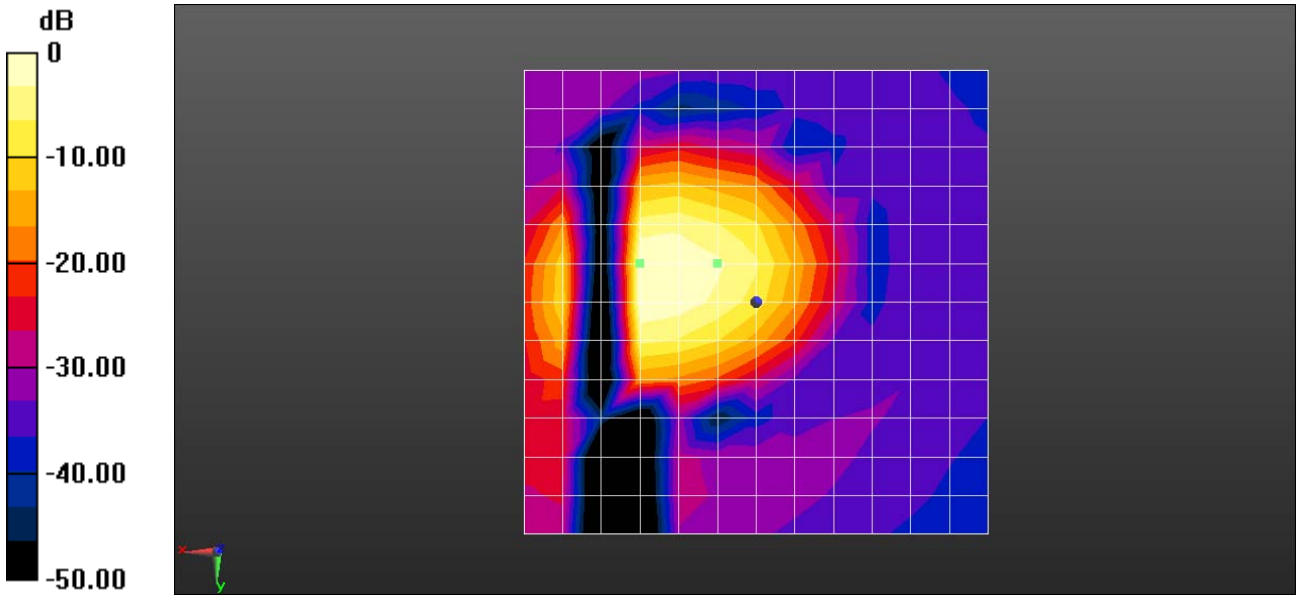
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.27 dBA/m
BWC Factor = 0.15 dB
Location: 12.5, -4.2, 3.7 mm

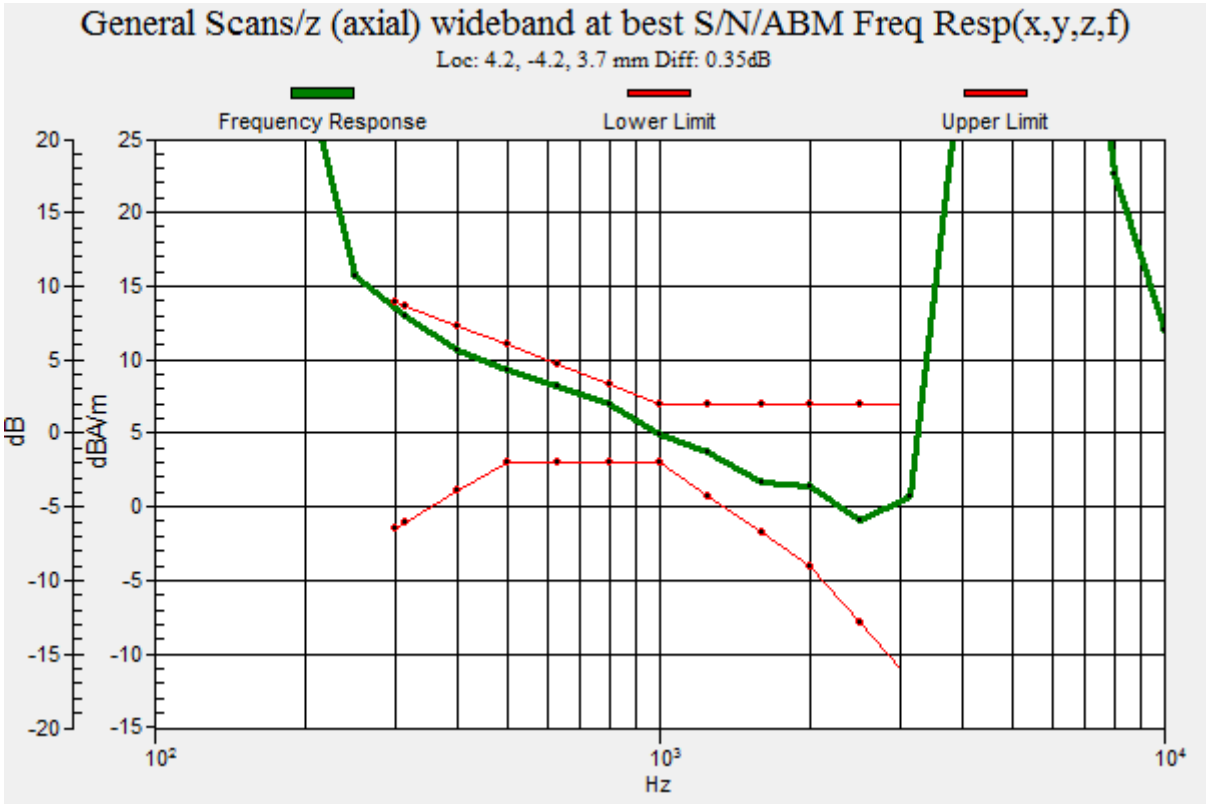
T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial)

wideband at best S/N/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: 100
Measure Window Start: 300ms
Measure Window Length: 2000ms
BWC applied: 10.78 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
Diff = 0.35 dB
BWC Factor = 10.78 dB
Location: 4.2, -4.2, 3.7 mm



0 dB = 508.5 = 54.13 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -4.2, 3.7 mm Diff: 0.35dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
25
20
15
10
5
0
-5
-10
-15
10²
10³
10⁴

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 12 23.85k QPSK 10M 50%RB 13 Offset 23095CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

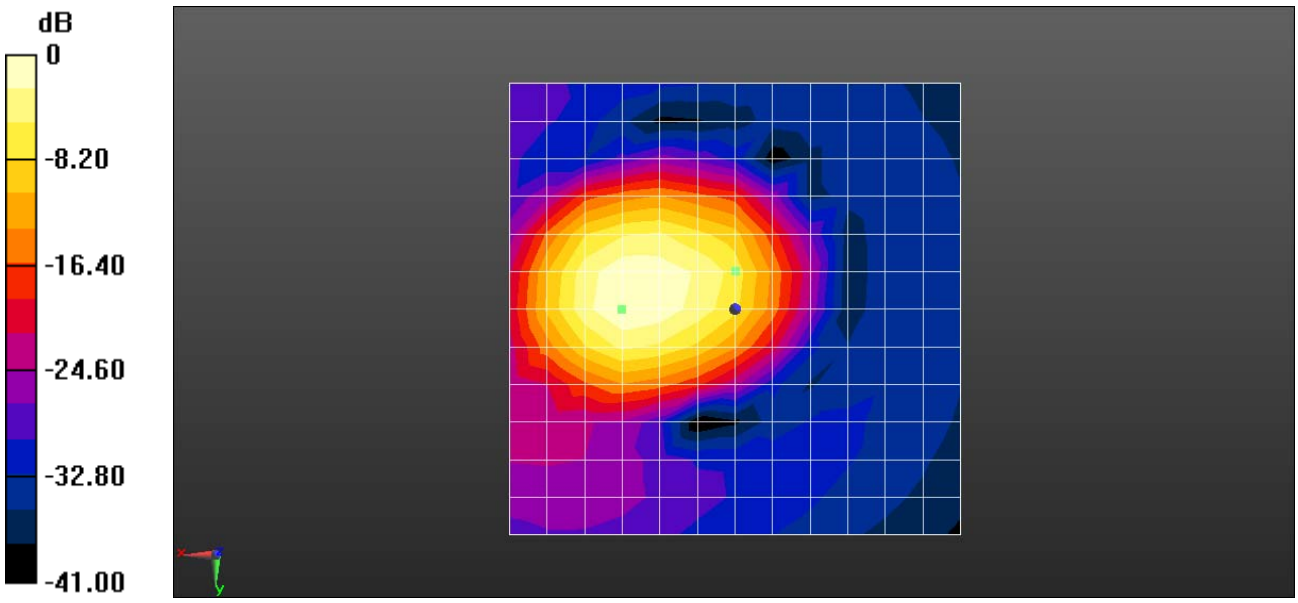
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 53.10 dB
ABM1 comp = 7.98 dBA/m
BWC Factor = 0.15 dB
Location: 0, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.64 dBA/m
BWC Factor = 0.15 dB
Location: 12.5, 0, 3.7 mm



0 dB = 451.7 = 53.10 dB

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 12 23.85k QPSK 10M 50%RB 13 Offset 23095CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

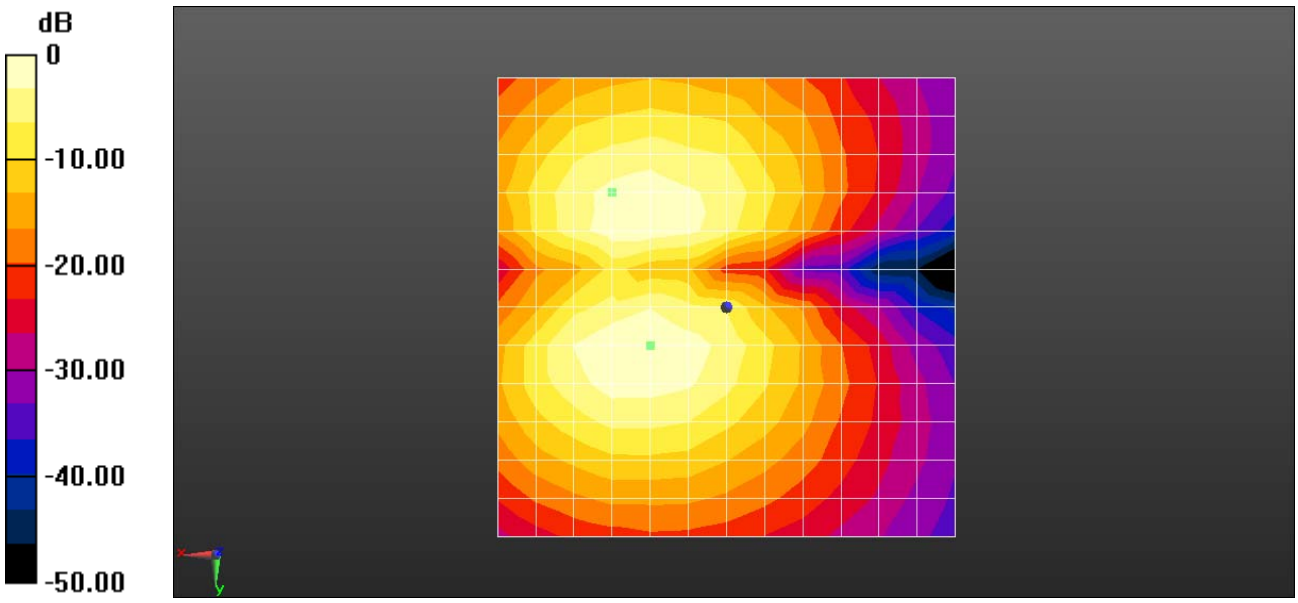
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 53.55 dB
ABM1 comp = 5.22 dBA/m
BWC Factor = 0.15 dB
Location: 12.5, -12.5, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 7.38 dBA/m
BWC Factor = 0.15 dB
Location: 8.3, 4.2, 3.7 mm



0 dB = 476.1 = 53.55 dB

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 12 23.85k QPSK 10M 50%RB 13 Offset 23095CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 53.10 dB
ABM1 comp = 7.98 dBA/m
BWC Factor = 0.15 dB
Location: 0, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

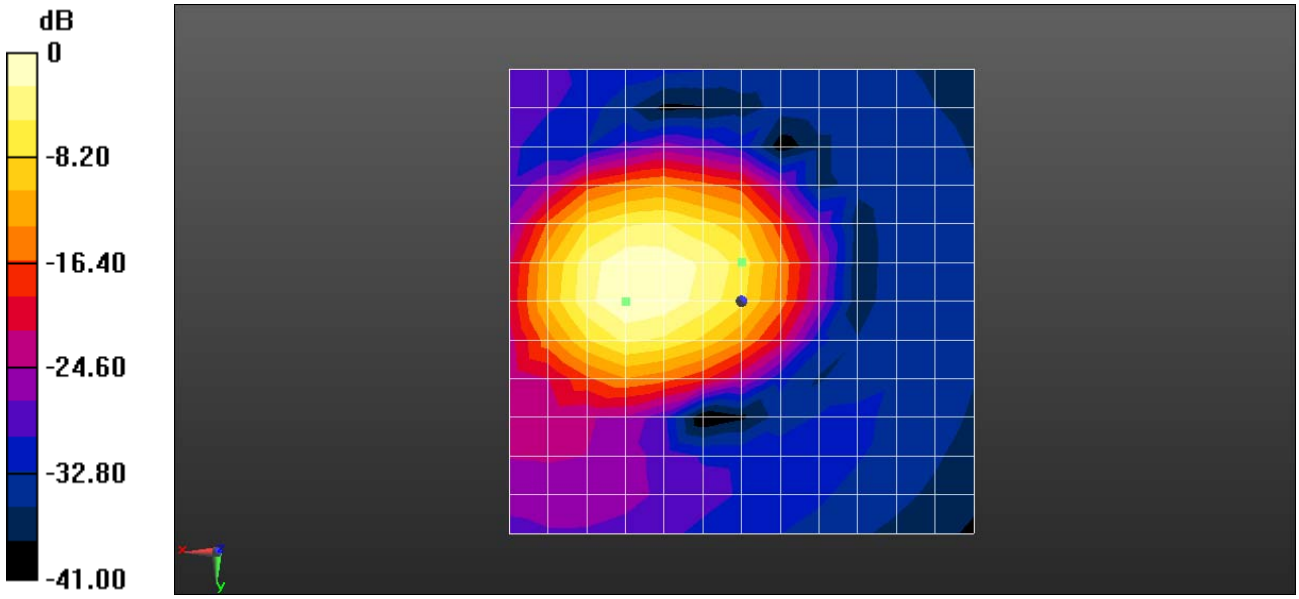
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.64 dBA/m
BWC Factor = 0.15 dB
Location: 12.5, 0, 3.7 mm

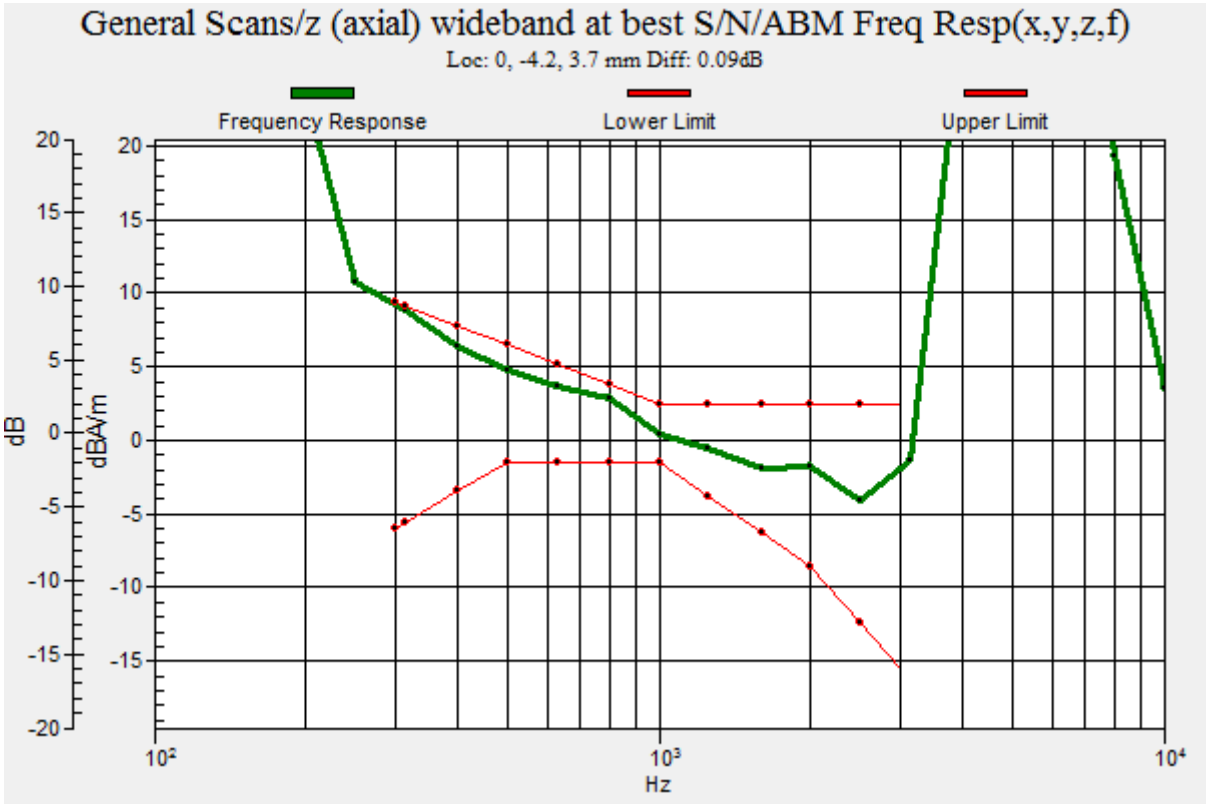
T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial)

wideband at best S/N/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: 100
Measure Window Start: 300ms
Measure Window Length: 2000ms
BWC applied: 10.78 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
Diff = 0.09 dB
BWC Factor = 10.78 dB
Location: 0, -4.2, 3.7 mm



0 dB = 451.7 = 53.10 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 0, -4.2, 3.7 mm Diff: 0.09dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 17 23.85k QPSK 10M 50%RB 13 Offset 23790CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 710 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

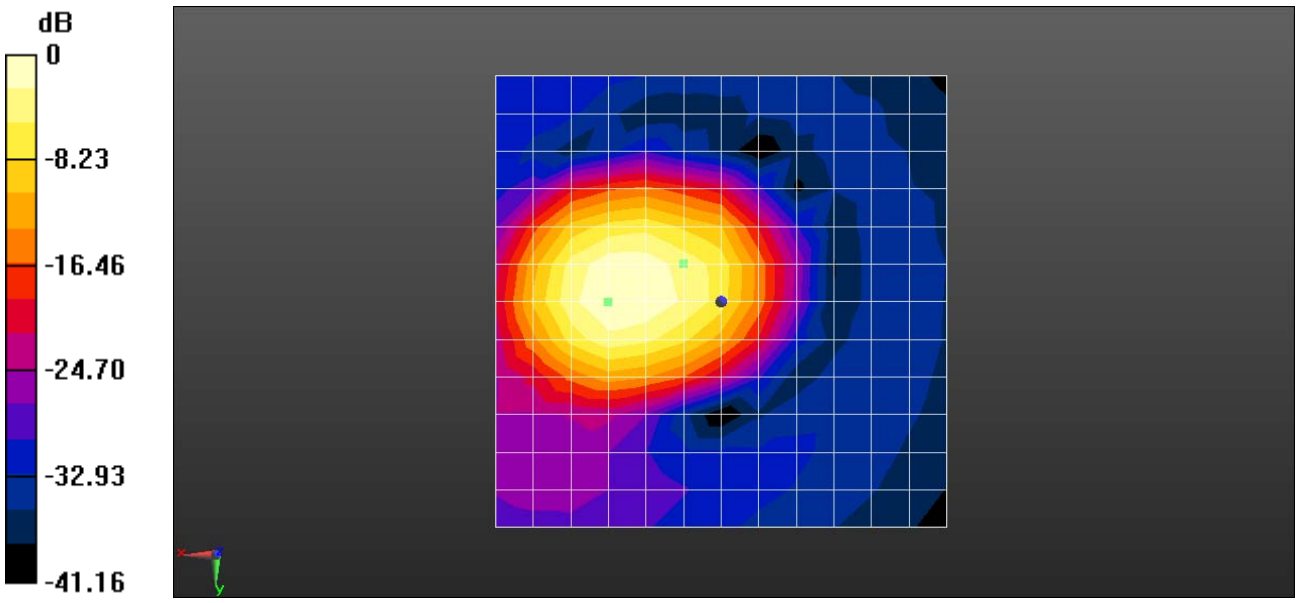
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 54.80 dB
ABM1 comp = 10.58 dBA/m
BWC Factor = 0.15 dB
Location: 4.2, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.38 dBA/m
BWC Factor = 0.15 dB
Location: 12.5, 0, 3.7 mm



0 dB = 549.3 = 54.80 dB

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 17 23.85k QPSK 10M 50%RB 13 Offset 23790CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 710 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

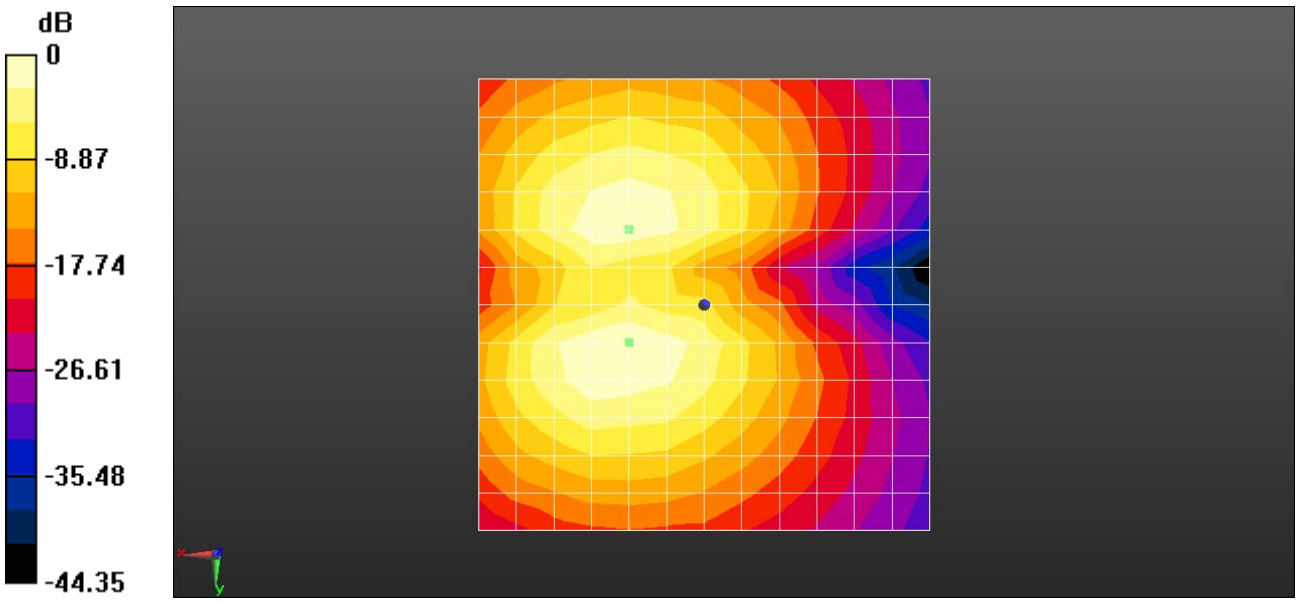
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 54.34 dB
ABM1 comp = 6.39 dBA/m
BWC Factor = 0.15 dB
Location: 8.3, -8.3, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/y (transversal) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 7.55 dBA/m
BWC Factor = 0.15 dB
Location: 8.3, 4.2, 3.7 mm



0 dB = 520.9 = 54.34 dB

Date: 2018-2-9

Test Laboratory: HUAWEI SAR/HAC Lab

HAC-T-Coil FRD-L24 LTE Band 17 23.85k QPSK 10M 50%RB 13 Offset 23790CH

DUT: FRD-L24; Type: Smart Phone; Serial: SAR1

Communication System: UID 0, LTE-FDD (SC-FDMA, 10MHz, QPSK/16-QAM) (0); Frequency: 710 MHz;Duty Cycle: 1:1
Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Phantom section: TCoil Section

DASY Configuration:

- Probe: AM1DV3 - 3126; ; Calibrated: 2017-7-20
- Sensor-Surface: 0mm (Fix Surface), z = 3.0
- Electronics: DAE4 Sn1236; Calibrated: 2017-7-21
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1/ABM2 = 54.80 dB
ABM1 comp = 10.58 dBA/m
BWC Factor = 0.15 dB
Location: 4.2, -4.2, 3.7 mm

T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial) 4.2mm 50 x 50/ABM Signal(x,y,z) (13x13x1):

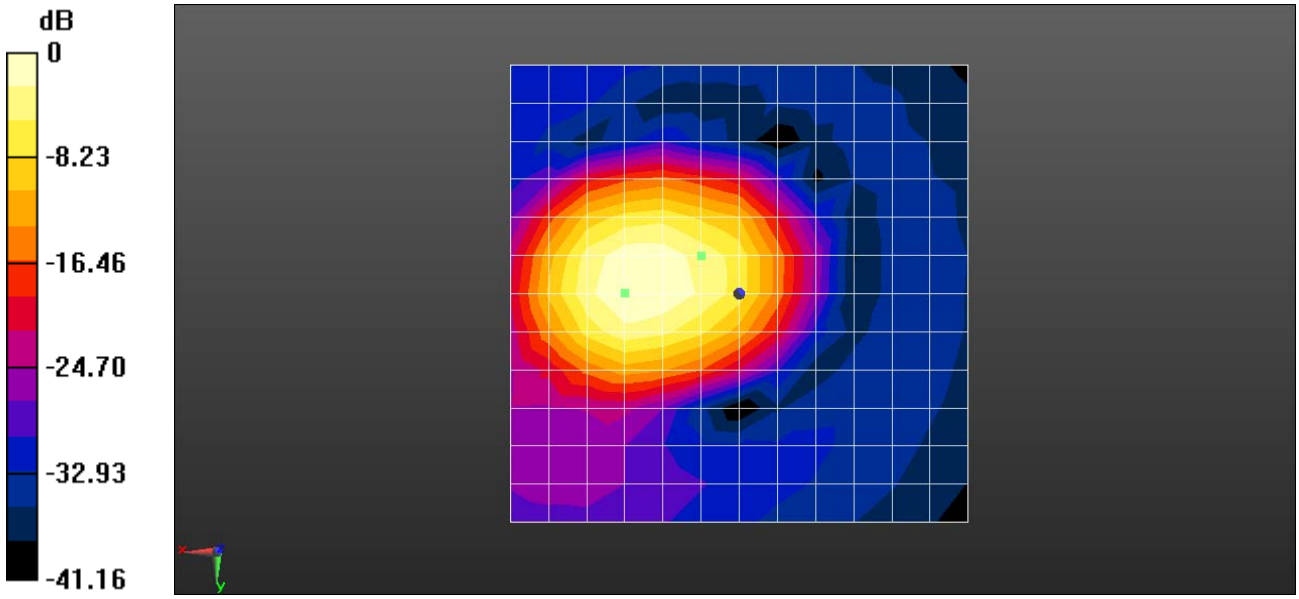
Measurement grid: dx=10mm, dy=10mm
Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav
Output Gain: 100
Measure Window Start: 300ms
Measure Window Length: 1000ms
BWC applied: 0.15 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
ABM1 comp = 14.38 dBA/m
BWC Factor = 0.15 dB
Location: 12.5, 0, 3.7 mm

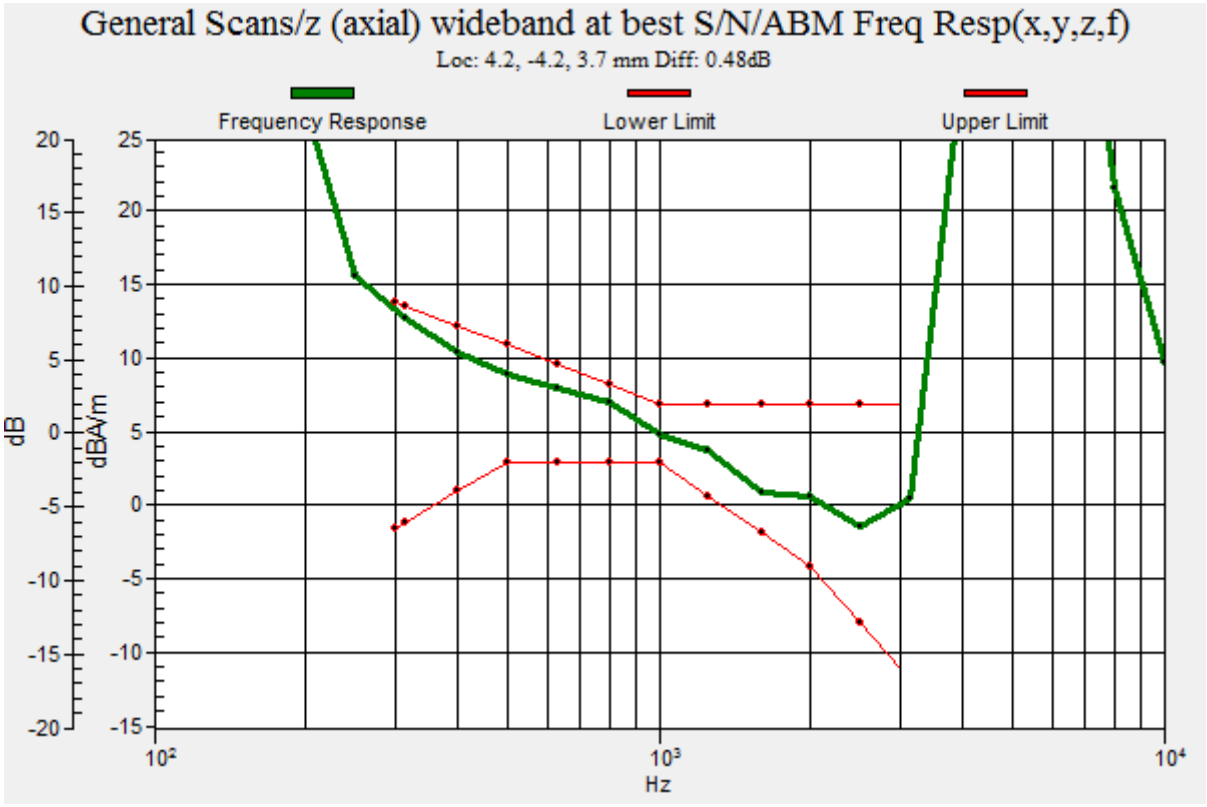
T-Coil scan (scan for ANSI C63.19-2011 compliance)/General Scans/z (axial)

wideband at best S/N/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: 100
Measure Window Start: 300ms
Measure Window Length: 2000ms
BWC applied: 10.78 dB
Device Reference Point: 0, 0, -6.3 mm

Cursor:
Diff = 0.48 dB
BWC Factor = 10.78 dB
Location: 4.2, -4.2, 3.7 mm



0 dB = 549.3 = 54.80 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -4.2, 3.7 mm Diff: 0.48dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
25
20
15
10
5
0
-5
-10
-15
10²
10³
10⁴