

#01_HAC_T-Coil_GSM850_Voice_Ch189_Axial (Z)

Communication System: GSM850; Frequency: 836.4 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 23.78 dB

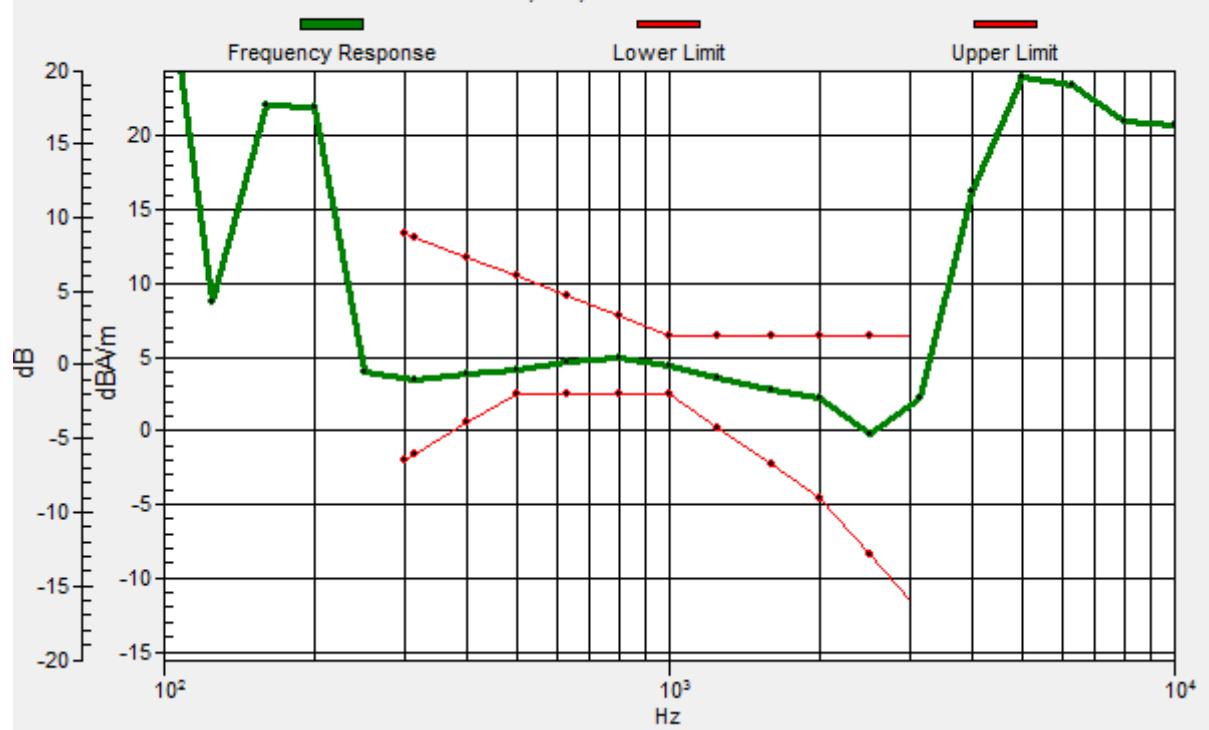
ABM1 comp = 3.79 dBA/m

Location: -3, -4, 3.7 mm



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

Loc: -2.9, -3.7, 3.7 mm Diff: 1.64dB



#01_HAC_T-Coil_GSM850_Voice_Ch189_Transversal (Y)

Communication System: GSM850; Frequency: 836.4 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 25.08 dB

ABM1 comp = -14.75 dBA/m

Location: -12.8, 3, 3.7 mm



#02_HAC_T-Coil_GSM1900_Voice_Ch661_Axial (Z)

Communication System: PCS ; Frequency: 1880 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 27.71 dB

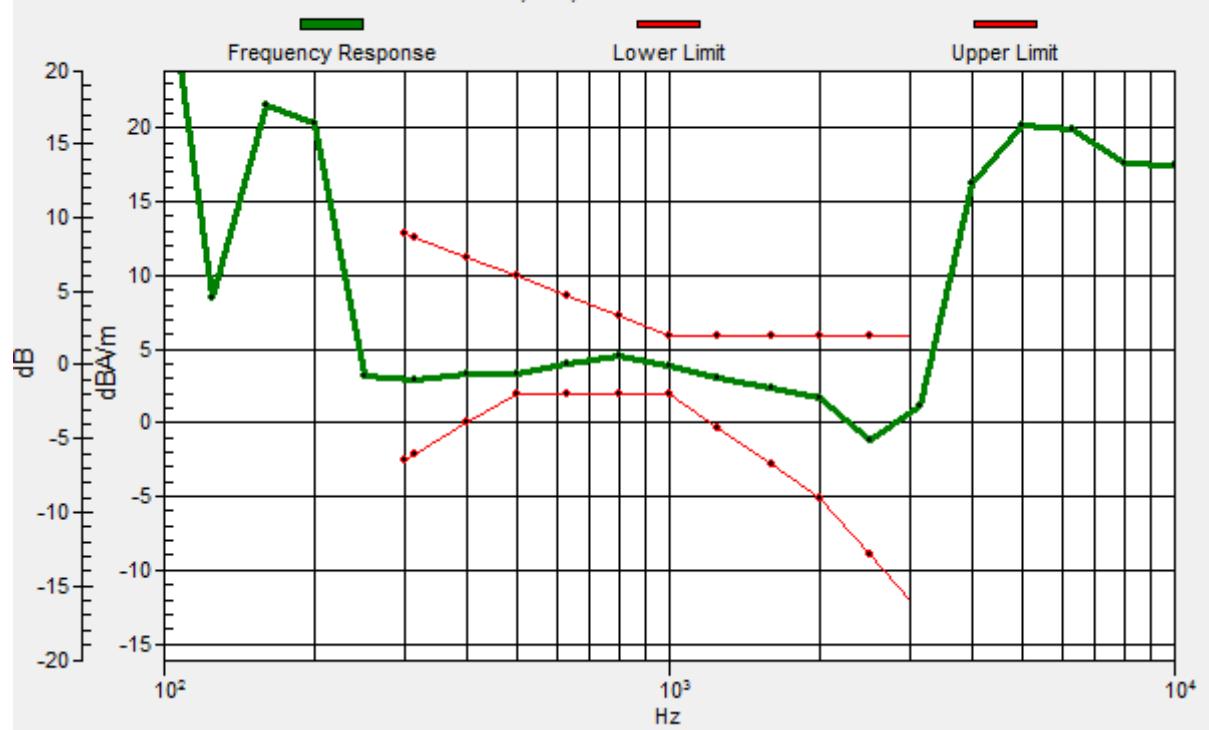
ABM1 comp = 3.27 dBA/m

Location: -3, -4, 3.7 mm



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

Loc: -3, -3.7, 3.7 mm Diff: 1.45dB



#02_HAC_T-Coil_GSM1900_Voice_Ch661_Transversal (Y)

Communication System: PCS ; Frequency: 1880 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 28.83 dB

ABM1 comp = -6.22 dBA/m

Location: -6.5, 3, 3.7 mm



#03_HAC_T-Coil_WCDMA II_Voice_Ch9400_Axial (Z)

Communication System: WCDMA ; Frequency: 1880 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 41.63 dB

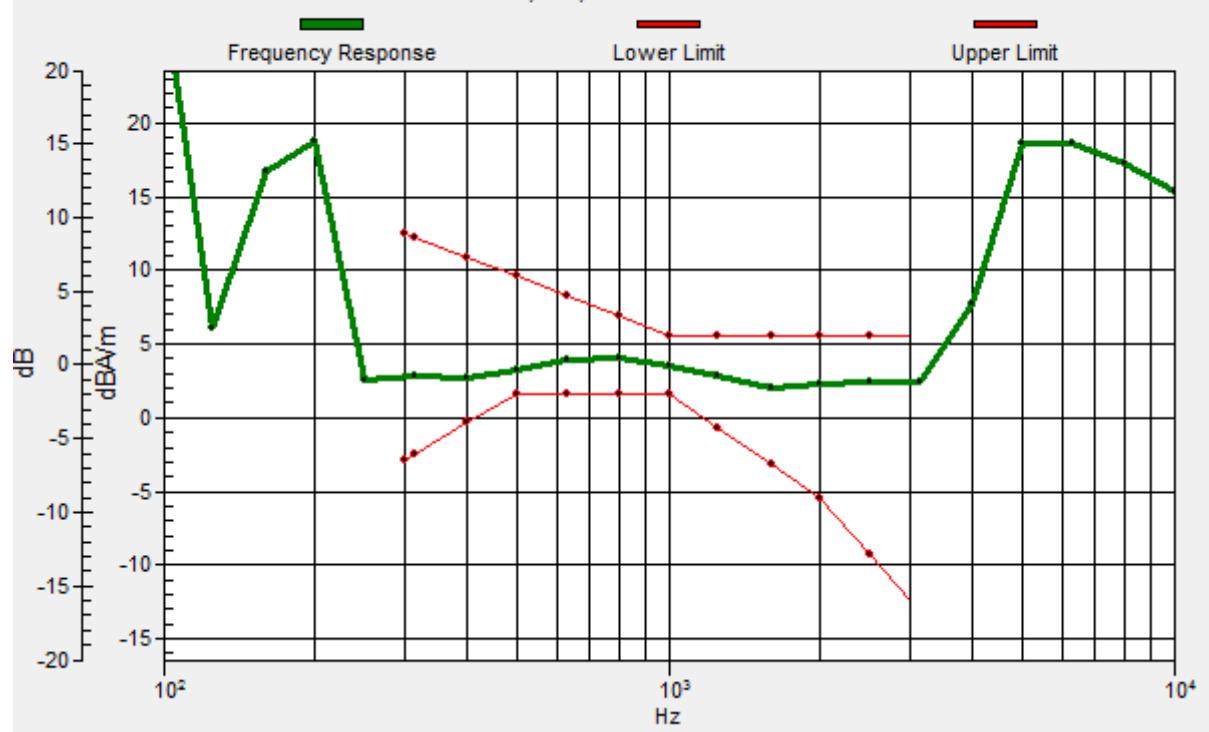
ABM1 comp = 3.60 dBA/m

Location: -3, -1.9, 3.7 mm



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

Loc: -3.1, -1.6, 3.7 mm Diff: 1.71dB



#03_HAC_T-Coil_WCDMA II_Voice_Ch9400_Transversal (Y)

Communication System: WCDMA ; Frequency: 1880 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 37.83 dB

ABM1 comp = -3.36 dBA/m

Location: -4.4, 3.7, 3.7 mm



#04_HAC_T-Coil_WCDMA IV_Voice_Ch1413_Axial (Z)

Communication System: WCDMA ; Frequency: 1732.6 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 39.35 dB

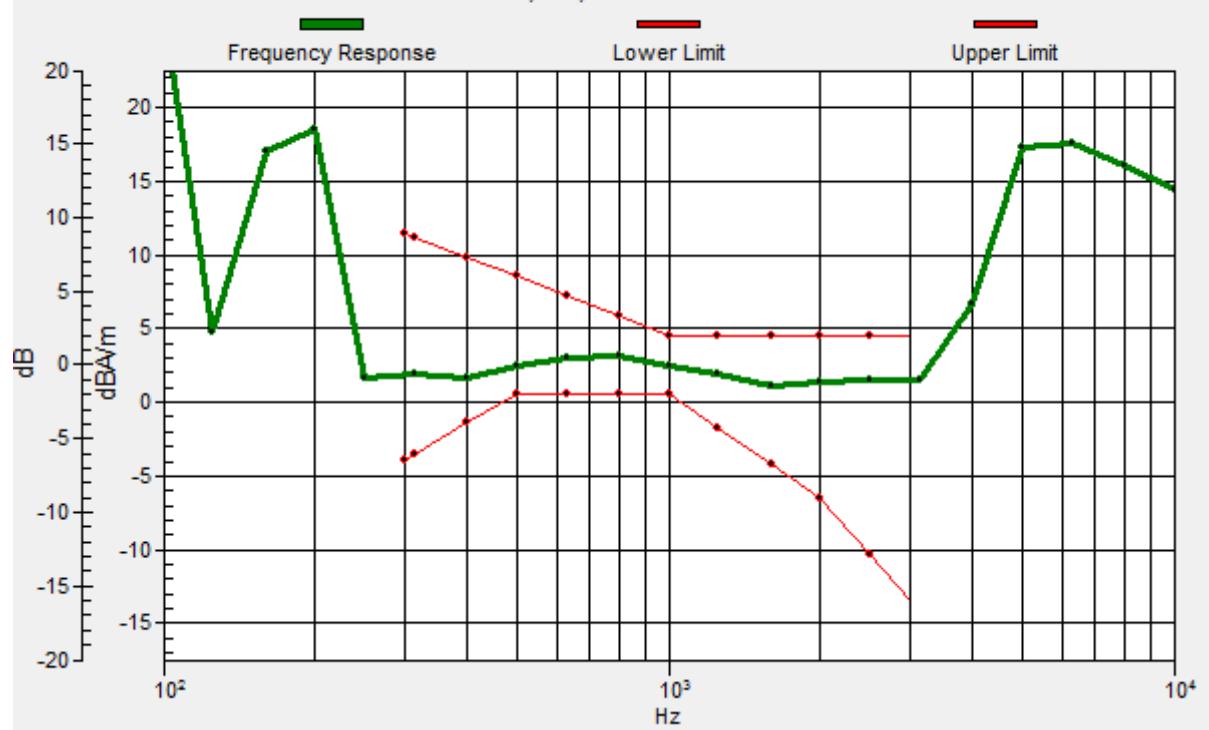
ABM1 comp = 3.08 dBA/m

Location: -3.7, -2.6, 3.7 mm



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

Loc: -3.6, -2.3, 3.7 mm Diff: 1.91dB



#04_HAC_T-Coil_WCDMA IV_Voice_Ch1413_Transversal (Y)

Communication System: WCDMA ; Frequency: 1732.6 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 36.56 dB

ABM1 comp = -3.19 dBA/m

Location: -3.7, 3, 3.7 mm



#05_HAC_T-Coil_WCDMA_V_Voice_Ch4182_Axial (Z)

Communication System: WCDMA ; Frequency: 836.4 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 40.77 dB

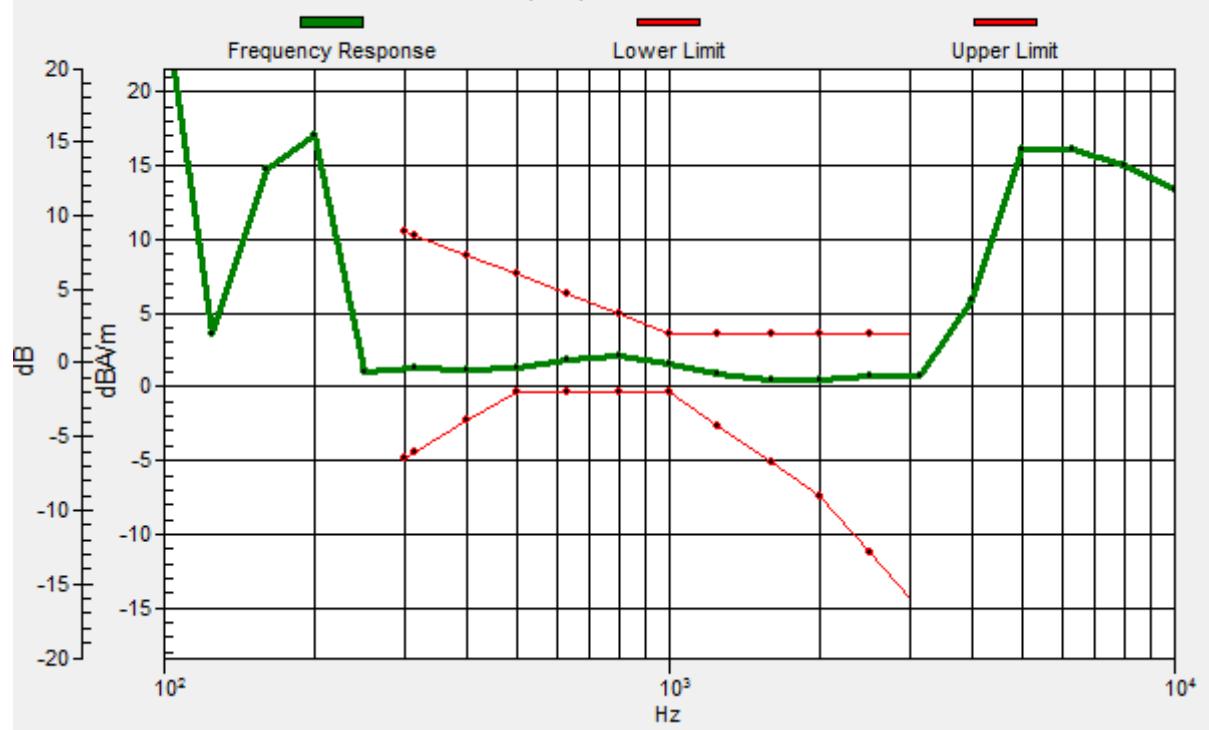
ABM1 comp = 2.34 dBA/m

Location: -4.4, -1.9, 3.7 mm



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

Loc: -4.5, -1.8, 3.7 mm Diff: 1.72dB



#05_HAC_T-Coil_WCDMA_V_Voice_Ch4182_Transversal (Y)

Communication System: WCDMA ; Frequency: 836.4 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 40.37 dB

ABM1 comp = -4.25 dBA/m

Location: -2.3, -11, 3.7 mm



#06_HAC_T-Coil_LTE Band 2_20M_QPSK_1_0_Ch18900_Axial (Z)

Communication System: LTE; Frequency: 1880 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 34.18 dB

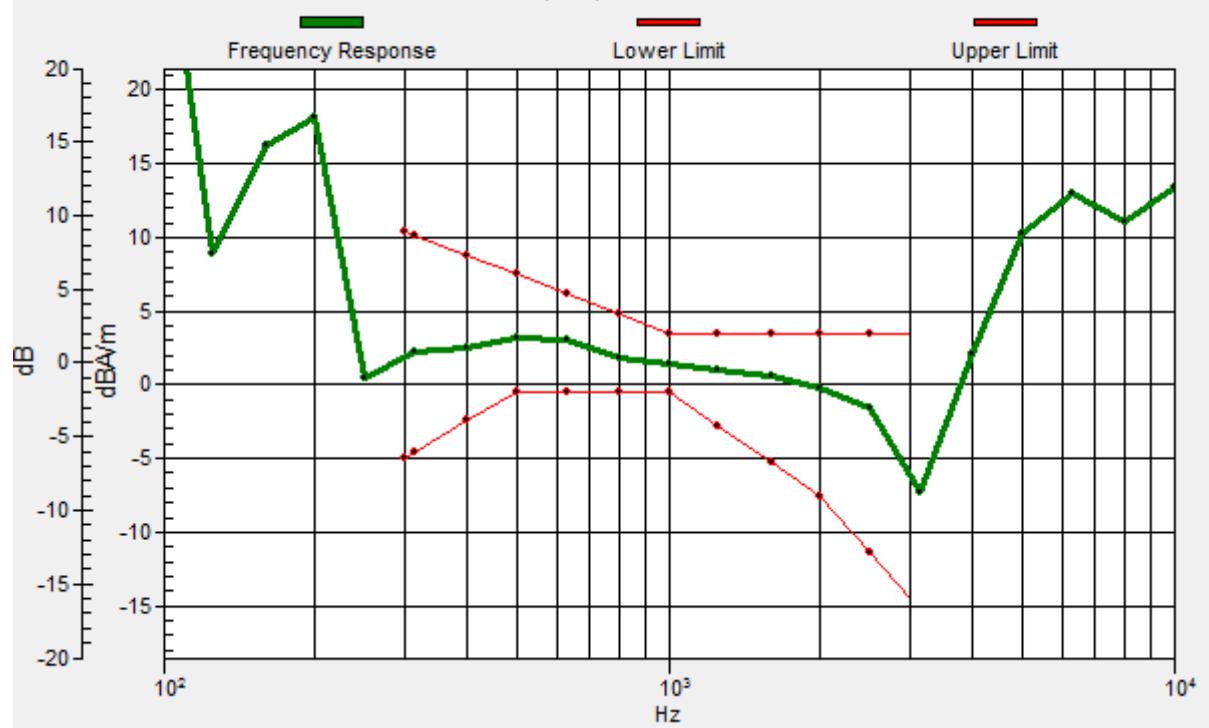
ABM1 comp = 0.40 dBA/m

Location: -3.7, -3.3, 3.7 mm



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

Loc: -3.7, -3.4, 3.7 mm Diff: 2dB



#06_HAC_T-Coil_LTE Band 2_20M_QPSK_1_0_Ch18900_Transversal (Y)

Communication System: LTE; Frequency: 1880 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

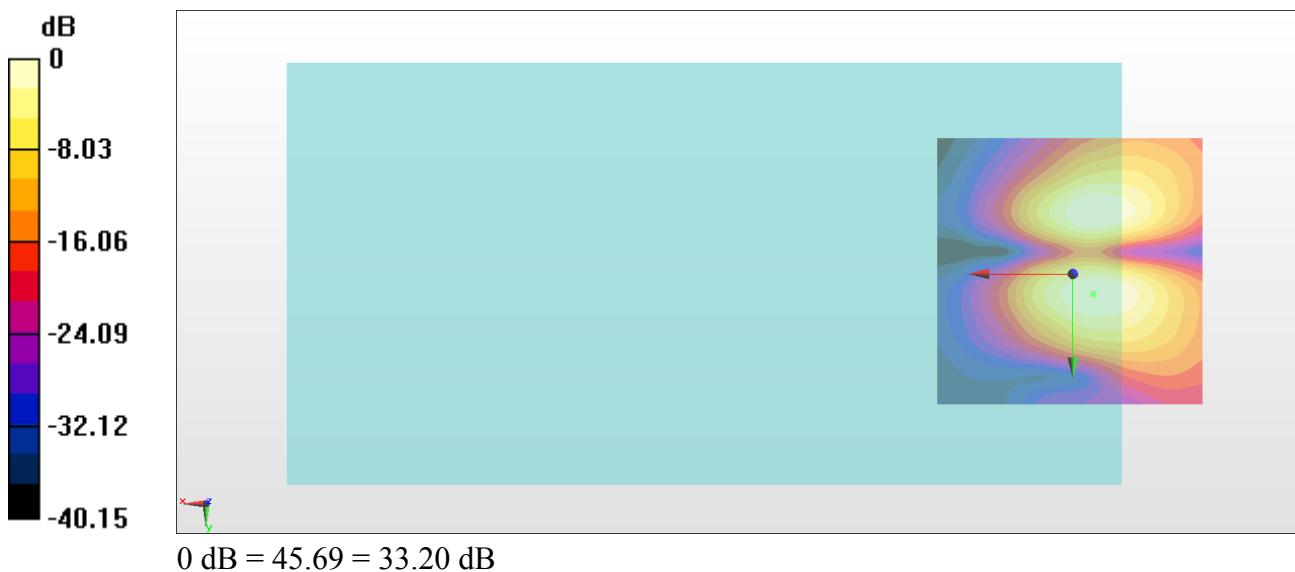
General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 33.20 dB

ABM1 comp = -4.95 dBA/m

Location: -3.7, 3.7, 3.7 mm



#07_HAC_T-Coil_LTE Band 5_10M_QPSK_1_0_Ch20525_Axial (Z)

Communication System: LTE; Frequency: 836.5 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 36.35 dB

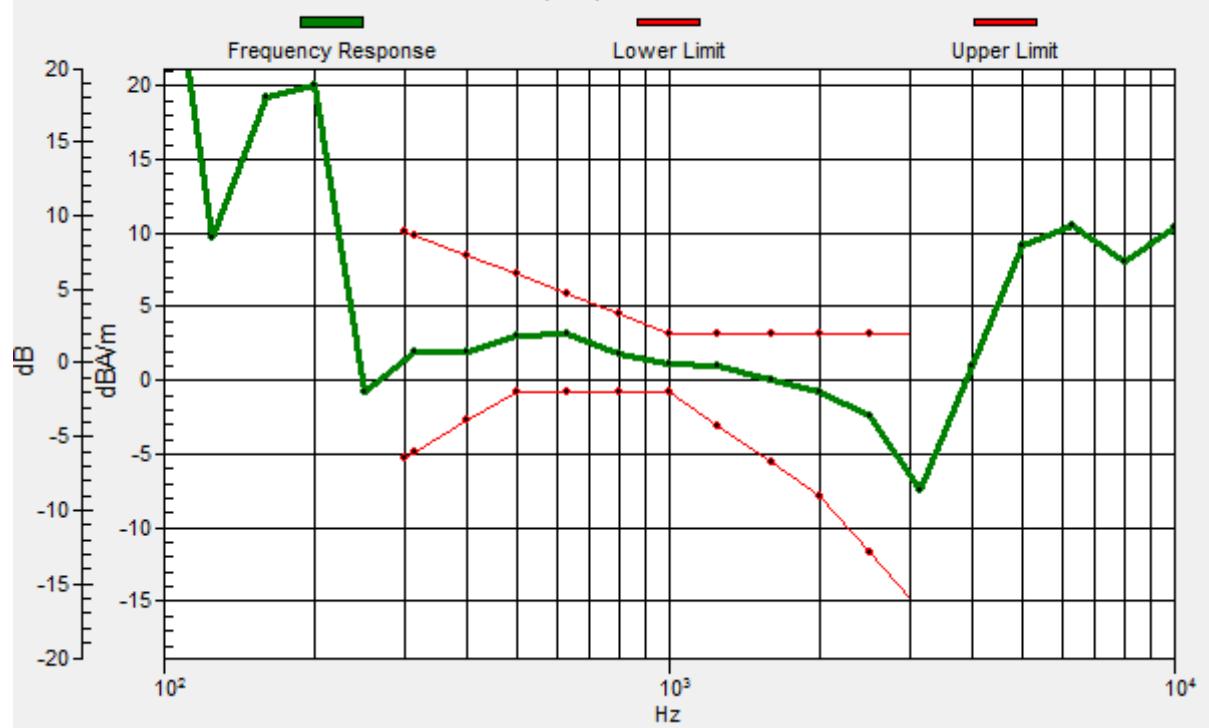
ABM1 comp = 0.69 dBA/m

Location: -3.7, -3.3, 3.7 mm



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

Loc: -3.9, -3.4, 3.7 mm Diff: 2dB



#07_HAC_T-Coil_LTE Band 5_10M_QPSK_1_0_Ch20525_Transversal (Y)

Communication System: LTE; Frequency: 836.5 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 35.29 dB

ABM1 comp = -7.63 dBA/m

Location: -4.4, -11, 3.7 mm



#08_HAC_T-Coil_LTE Band 7_20M_QPSK_1_0_Ch21100_Axial (Z)

Communication System: LTE; Frequency: 2535 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 33.83 dB

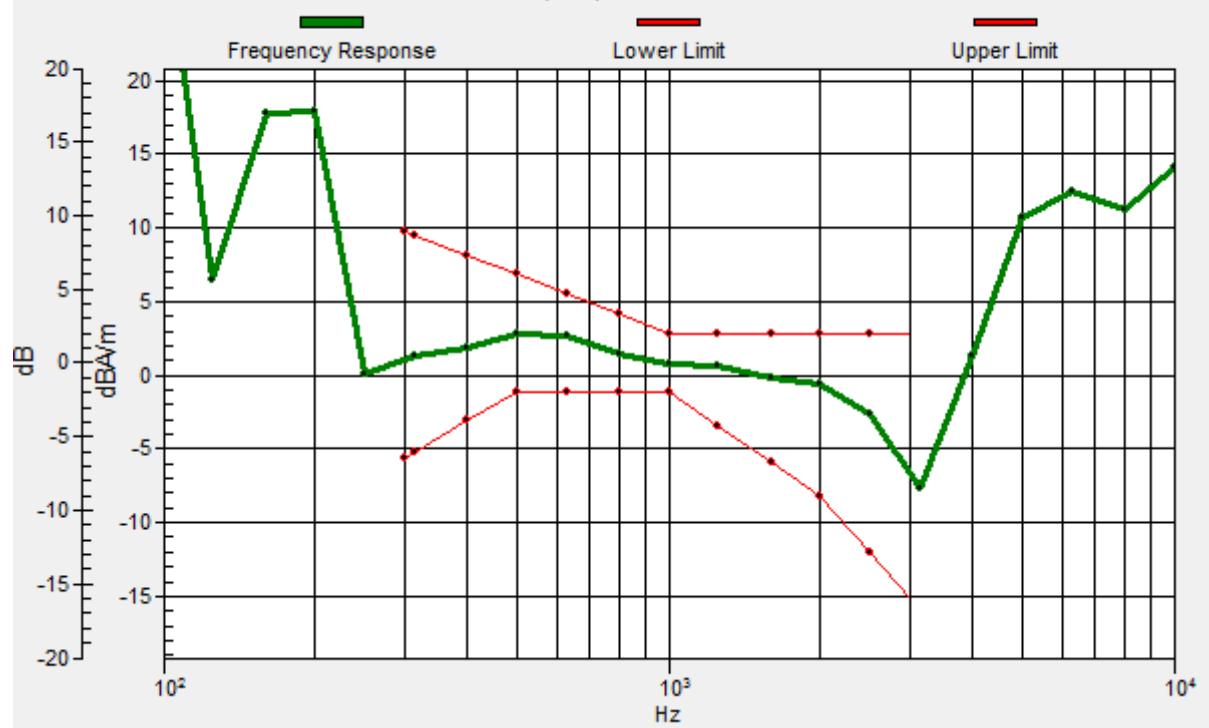
ABM1 comp = -0.27 dBA/m

Location: -4.4, -3.3, 3.7 mm



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

Loc: -4.1, -3.4, 3.7 mm Diff: 2dB



#08_HAC_T-Coil_LTE Band 7_20M_QPSK_1_0_Ch21100_Transversal (Y)

Communication System: LTE; Frequency: 2535 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 33.41 dB

ABM1 comp = -4.85 dBA/m

Location: -3.7, 3.7, 3.7 mm



#09_HAC_T-Coil_LTE Band 12_10M_QPSK_1_0_Ch23095_Axial (Z)

Communication System: LTE; Frequency: 707.5 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 36.32 dB

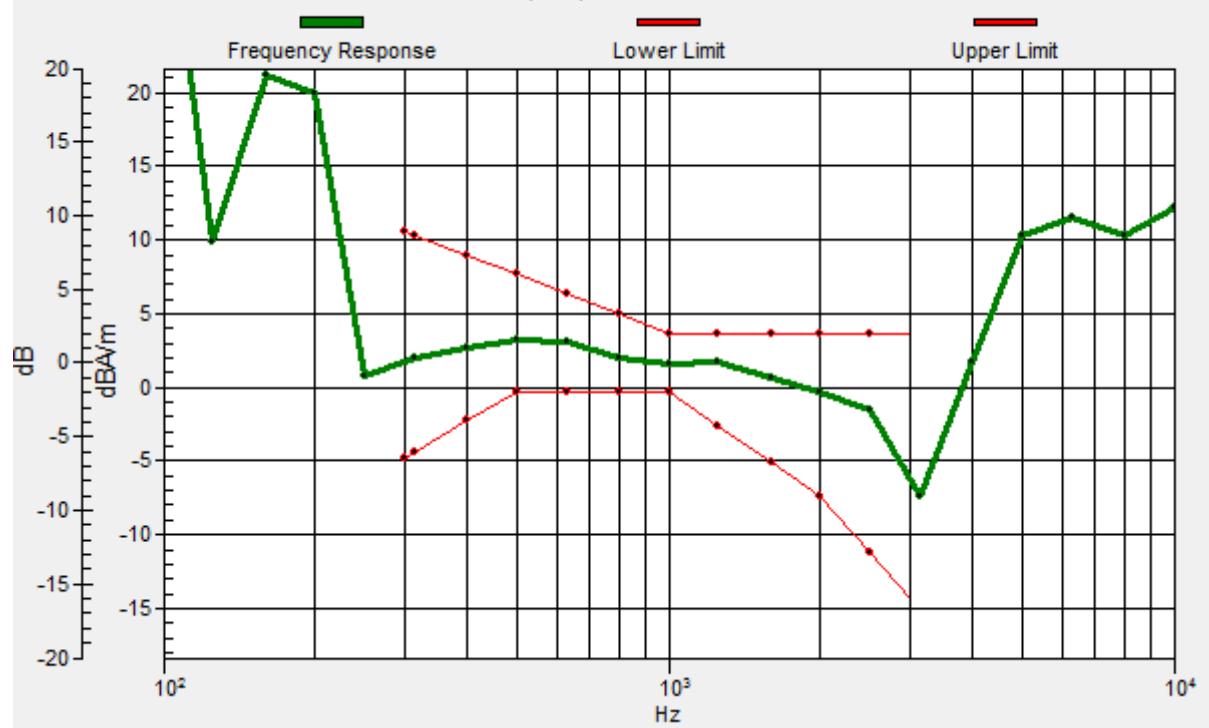
ABM1 comp = 0.40 dBA/m

Location: -3.7, -3.3, 3.7 mm



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

Loc: -3.5, -3.6, 3.7 mm Diff: 1.89dB



#09_HAC_T-Coil_LTE Band 12_10M_QPSK_1_0_Ch23095_Transversal (Y)

Communication System: LTE; Frequency: 707.5 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 35.74 dB

ABM1 comp = -4.67 dBA/m

Location: -3.7, 3.7, 3.7 mm



#10_HAC_T-Coil_LTE Band 13_10M_QPSK_1_0_Ch23230_Axial (Z)

Communication System: LTE; Frequency: 782 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 35.50 dB

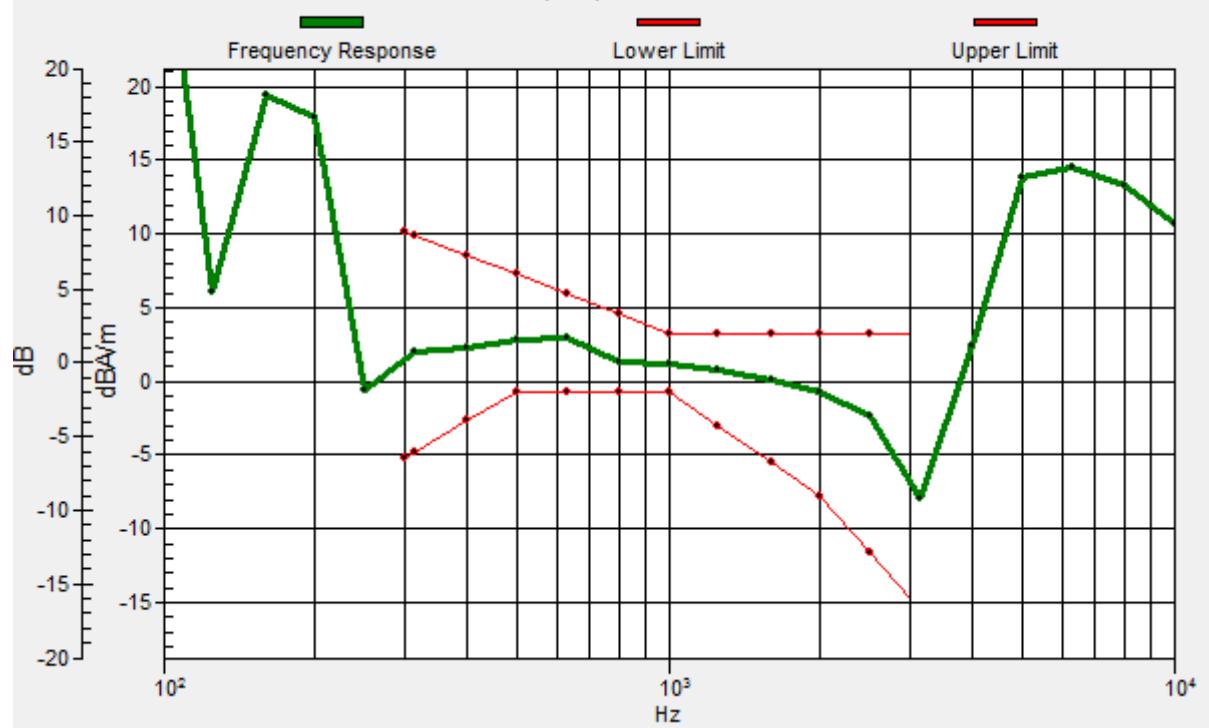
ABM1 comp = -0.37 dBA/m

Location: -4.4, -3.3, 3.7 mm



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

Loc: -4.1, -3.4, 3.7 mm Diff: 2dB



#10_HAC_T-Coil_LTE Band 13_10M_QPSK_1_0_Ch23230_Transversal (Y)

Communication System: LTE; Frequency: 782 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 35.15 dB

ABM1 comp = -4.27 dBA/m

Location: -3, 3.7, 3.7 mm



#11_HAC_T-Coil_LTE Band 38_20M_QPSK_1_0_Ch38000_Axial (Z)

Communication System: LTE TDD ; Frequency: 2595 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 31.64 dB

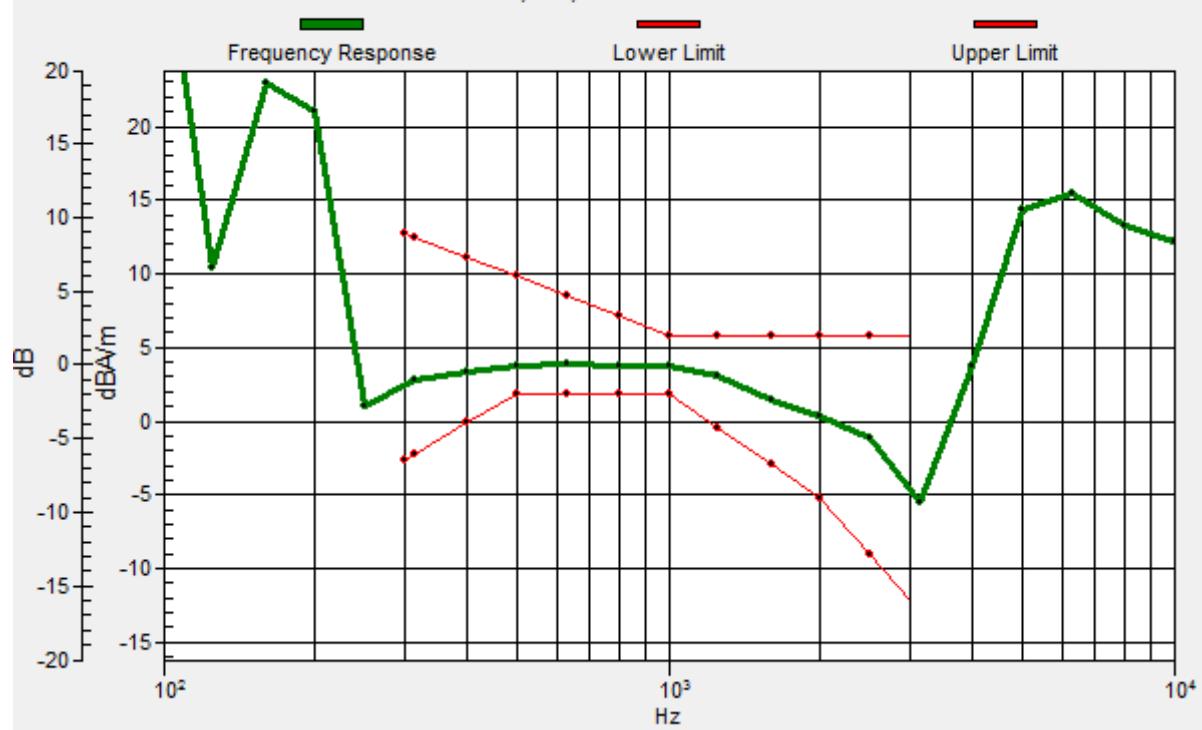
ABM1 comp = 2.41 dBA/m

Location: -3, -3.3, 3.7 mm



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

Loc: -3, -3.4, 3.7 mm Diff: 1.88dB



#11_HAC_T-Coil_LTE Band 38_20M_QPSK_1_0_Ch38000_Transversal (Y)

Communication System: LTE TDD ; Frequency: 2595 MHz

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

Ambient Temperature : 23.3 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

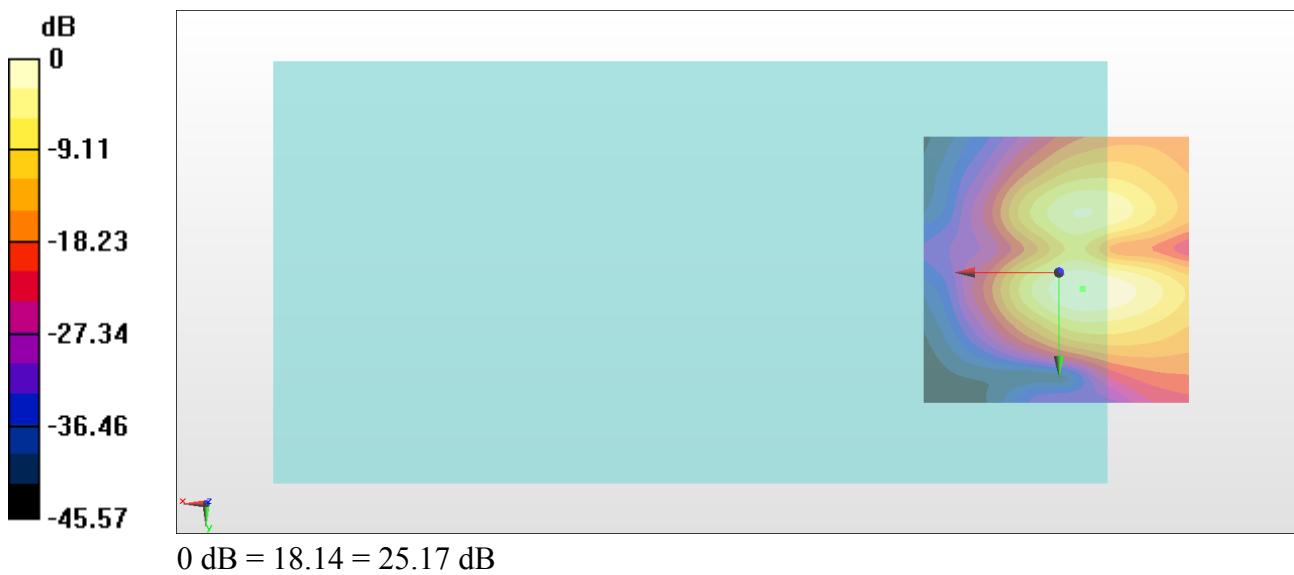
General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 25.17 dB

ABM1 comp = -5.32 dBA/m

Location: -4.4, 3, 3.7 mm



#12_HAC_T-Coil_LTE Band 66_20M_QPSK_1_0_Ch132322_Axial (Z)

Communication System: LTE; Frequency: 1745 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

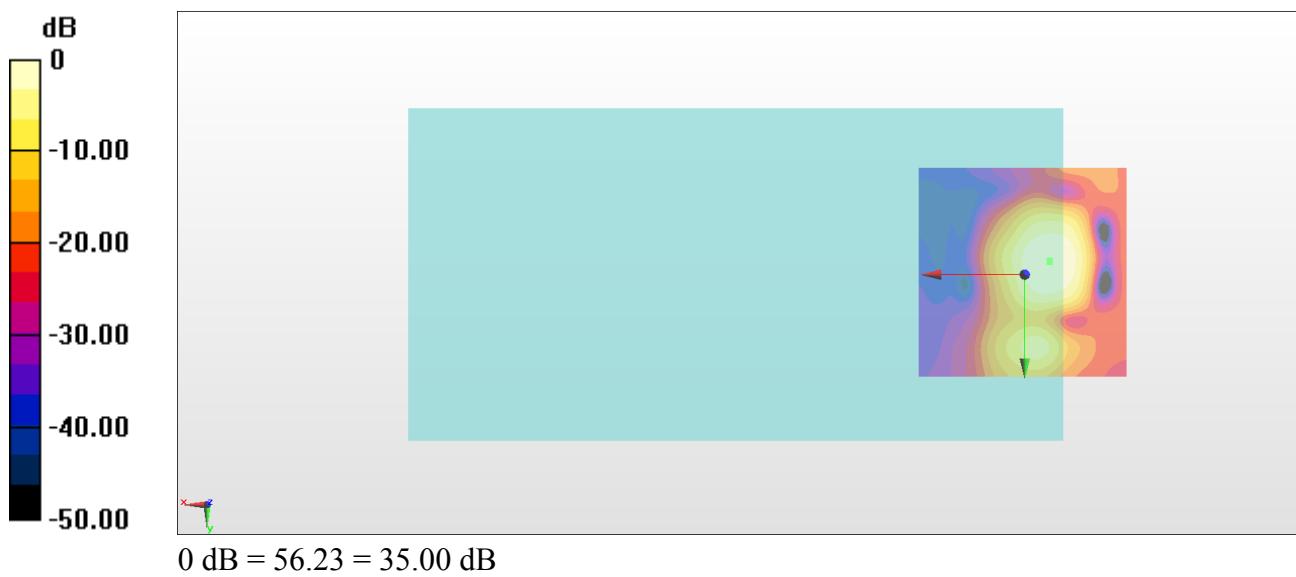
General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 35.00 dB

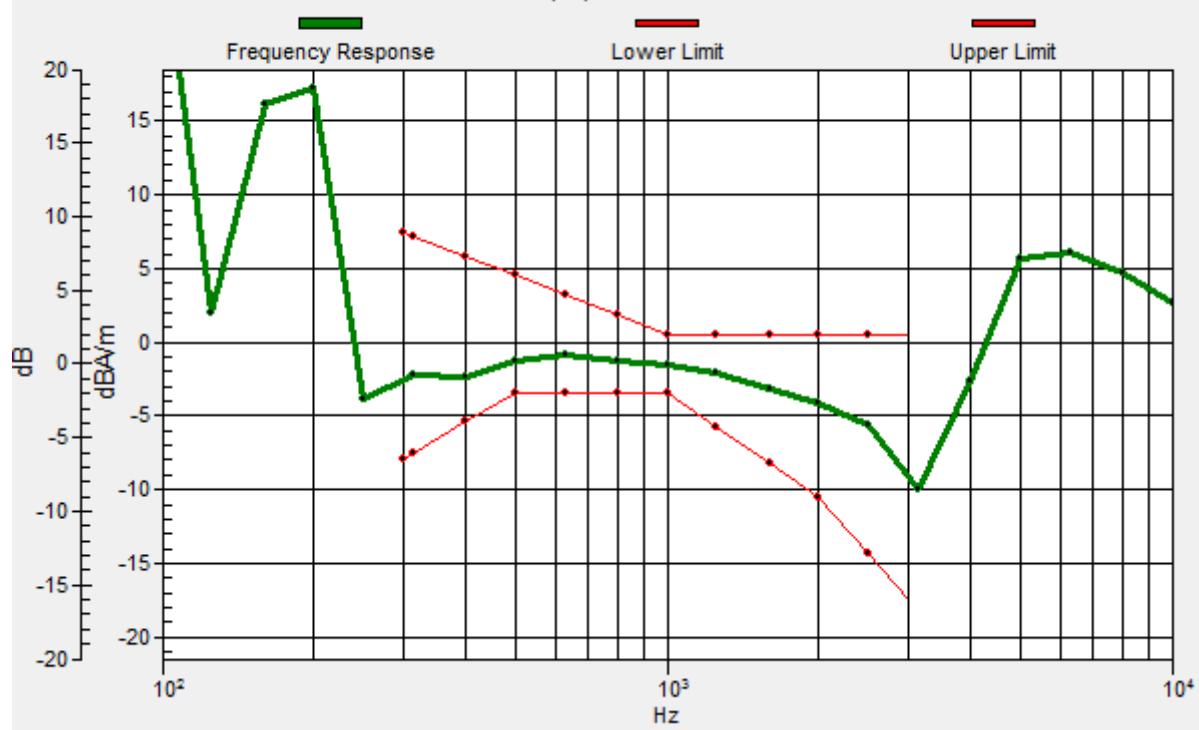
ABM1 comp = -1.51 dBA/m

Location: -5.8, -3.3, 3.7 mm



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

Loc: -5.9, -3, 3.7 mm Diff: 2dB



#12_HAC_T-Coil_LTE Band 66_20M_QPSK_1_0_Ch132322_Transversal (Y)

Communication System: LTE; Frequency: 1745 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0); SEMCAD X Version 14.6.10 (7417)

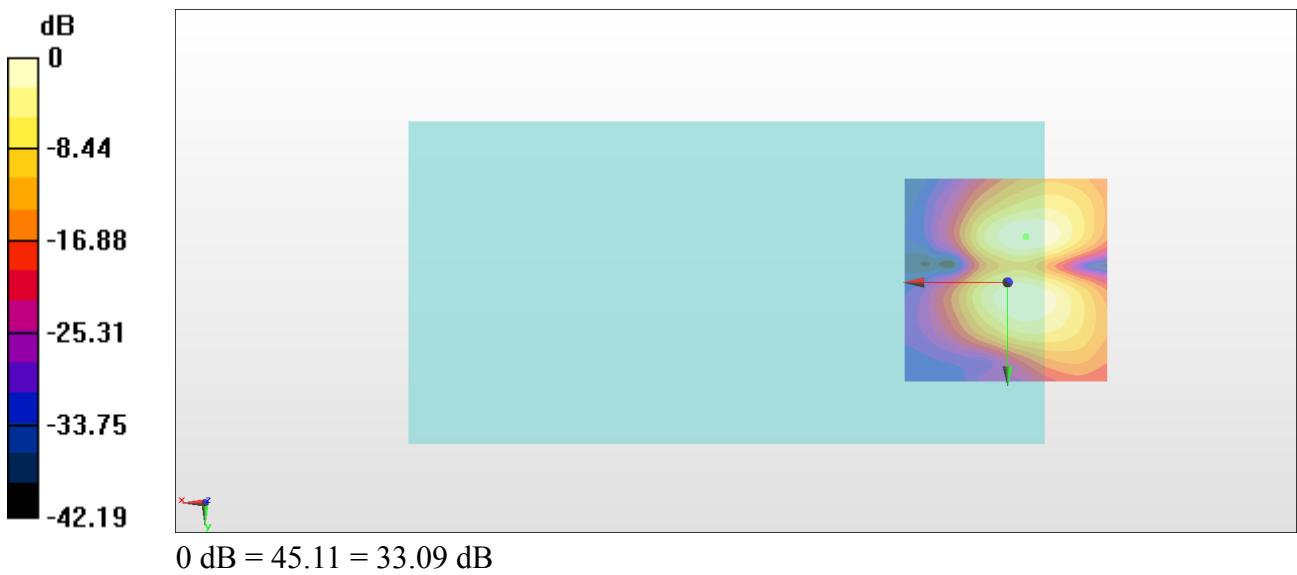
General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 33.09 dB

ABM1 comp = -8.07 dBA/m

Location: -4.4, -11, 3.7 mm



#13_HAC_T-Coil_GSM850_EDGE 2 Tx slots_Ch189_Axial (Z)

Communication System: GSM850 ; Frequency: 836.4 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 27.52 dB

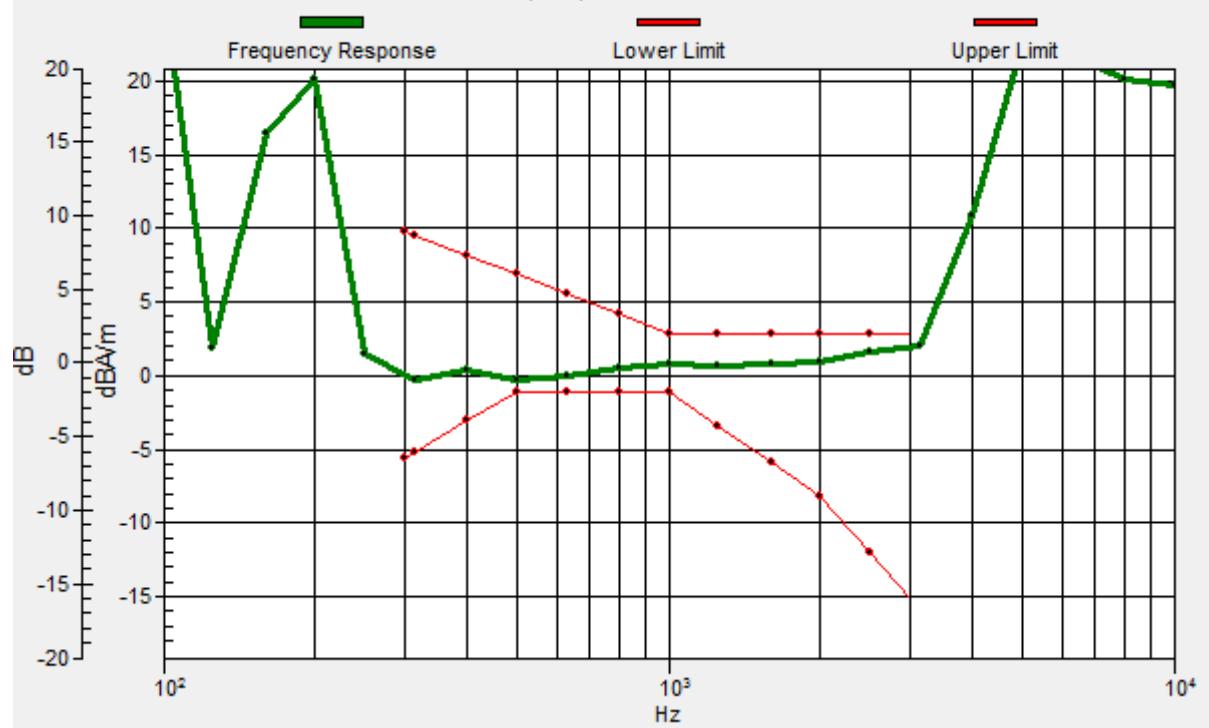
ABM1 comp = 1.94 dBA/m

Location: -3, -4, 3.7 mm



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

Loc: -2.9, -3.7, 3.7 mm Diff: 0.88dB



#13_HAC_T-Coil_GSM850_EDGE 2 Tx slots_Ch189_Transversal (Y)

Communication System: GSM850 ; Frequency: 836.4 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

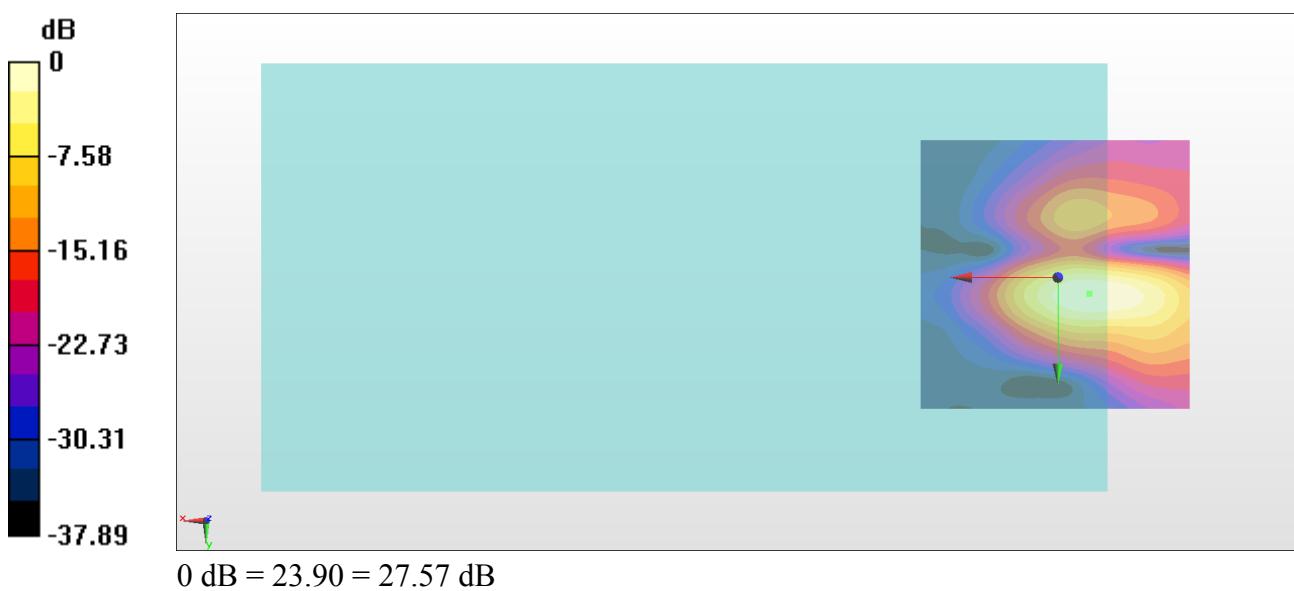
General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 27.57 dB

ABM1 comp = -7.83 dBA/m

Location: -5.8, 3, 3.7 mm



#14_HAC_T-Coil_GSM1900_EDGE 2 Tx slots_Ch661_Axial (Z)

Communication System: PCS; Frequency: 1880 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

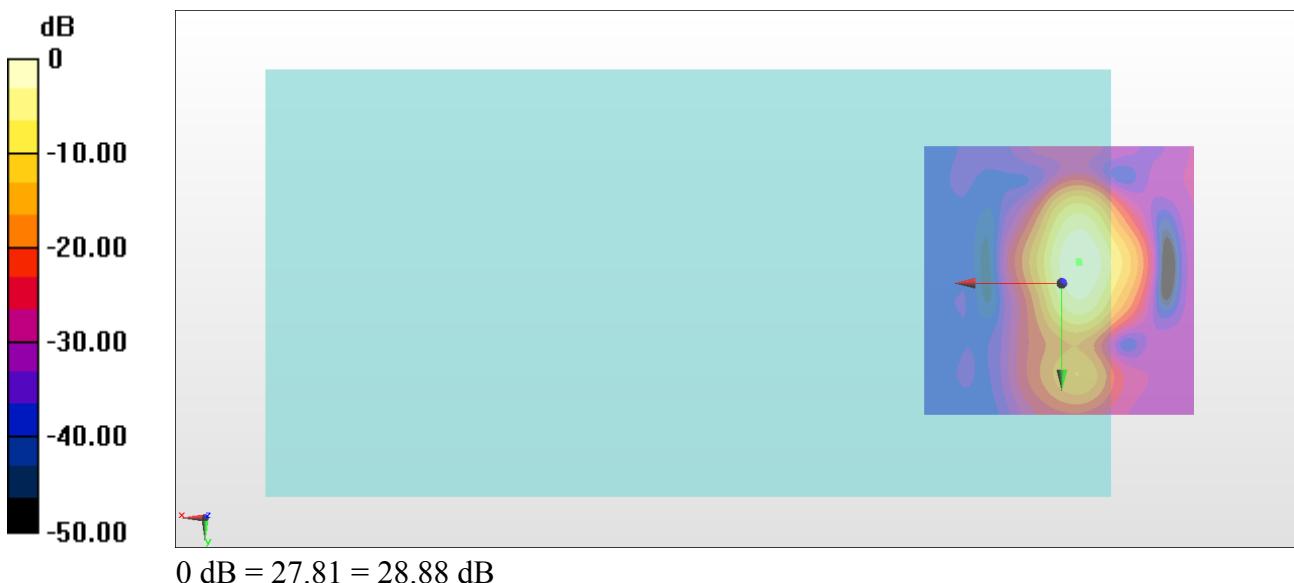
General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 28.88 dB

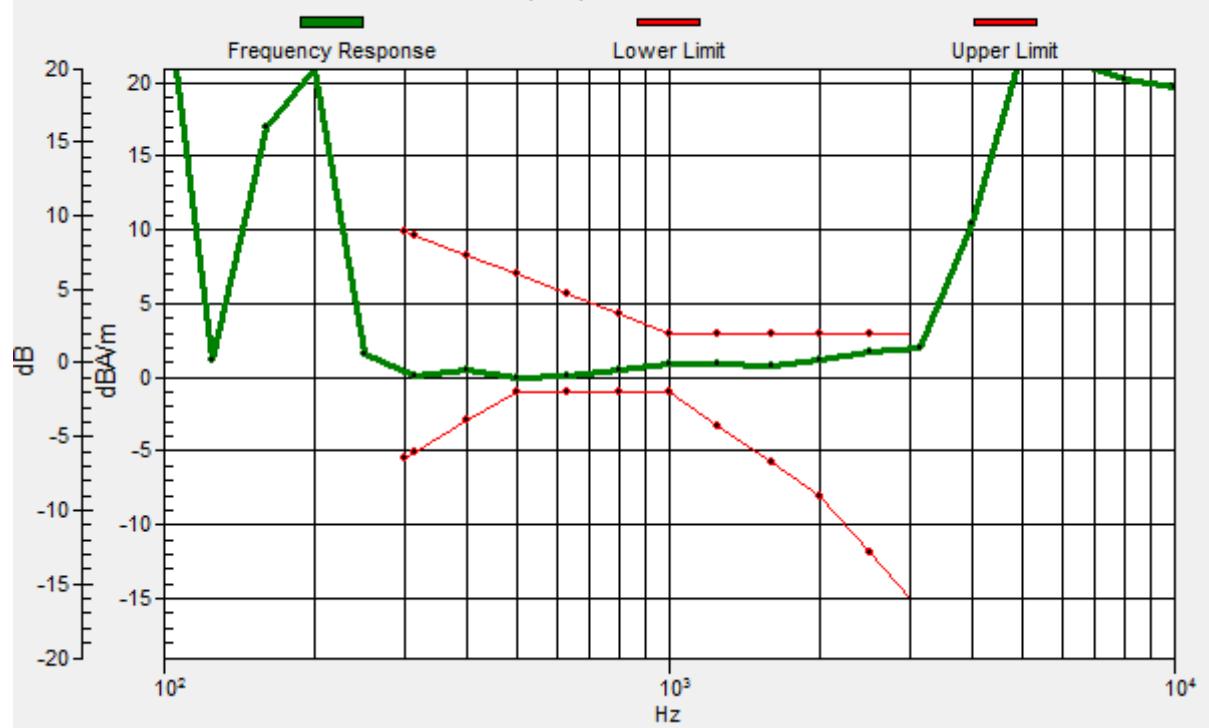
ABM1 comp = 1.88 dBA/m

Location: -3, -4, 3.7 mm



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

Loc: -3.1, -3.8, 3.7 mm Diff: 0.96dB



#14_HAC_T-Coil_GSM1900_EDGE 2 Tx slots_Ch661_Transversal (Y)

Communication System: PCS; Frequency: 1880 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

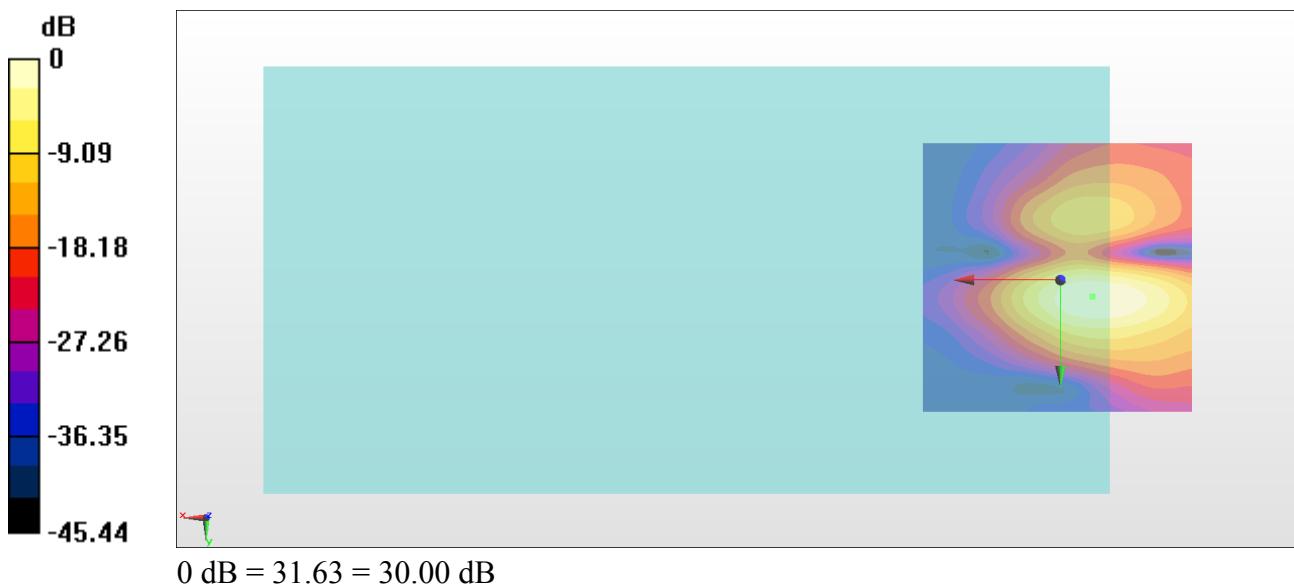
General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 30.00 dB

ABM1 comp = -5.50 dBA/m

Location: -5.8, 3, 3.7 mm



#15_HAC_T-Coil_WCDMA II_HSPA_Ch9400_Axial (Z)

Communication System: WCDMA ; Frequency: 1880 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

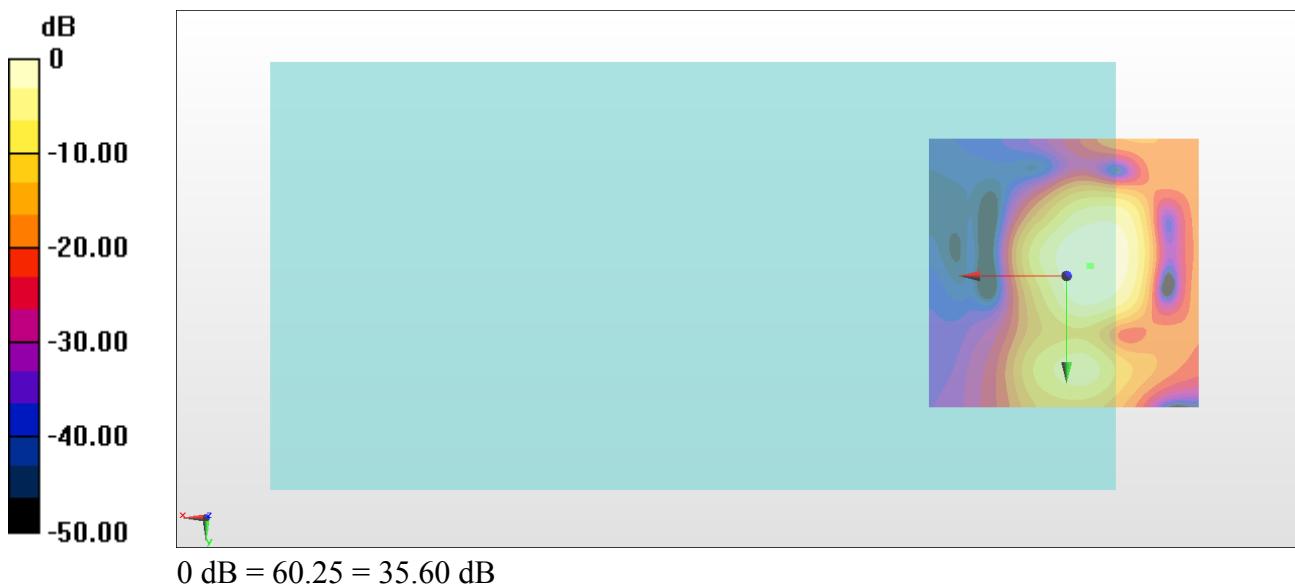
General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 35.60 dB

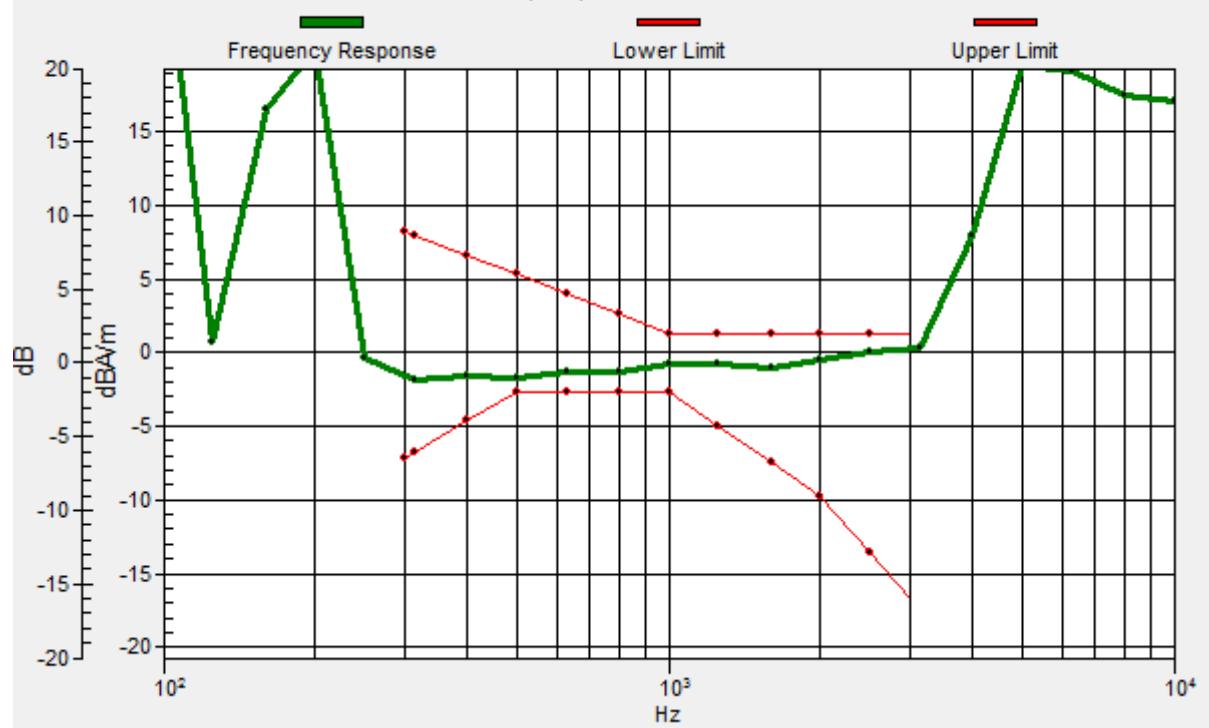
ABM1 comp = 1.18 dBA/m

Location: -4.4, -1.9, 3.7 mm



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

Loc: -4.2, -1.9, 3.7 mm Diff: 0.99dB



#15_HAC_T-Coil_WCDMA II_HSPA_Ch9400_Transversal (Y)

Communication System: WCDMA ; Frequency: 1880 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 35.23 dB

ABM1 comp = -7.59 dBA/m

Location: -5.1, -11.7, 3.7 mm



$$0 \text{ dB} = 57.74 = 35.23 \text{ dB}$$

#16_HAC_T-Coil_WCDMA IV_HSPA_Ch1413_Axial (Z)

Communication System: WCDMA; Frequency: 1732.6 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

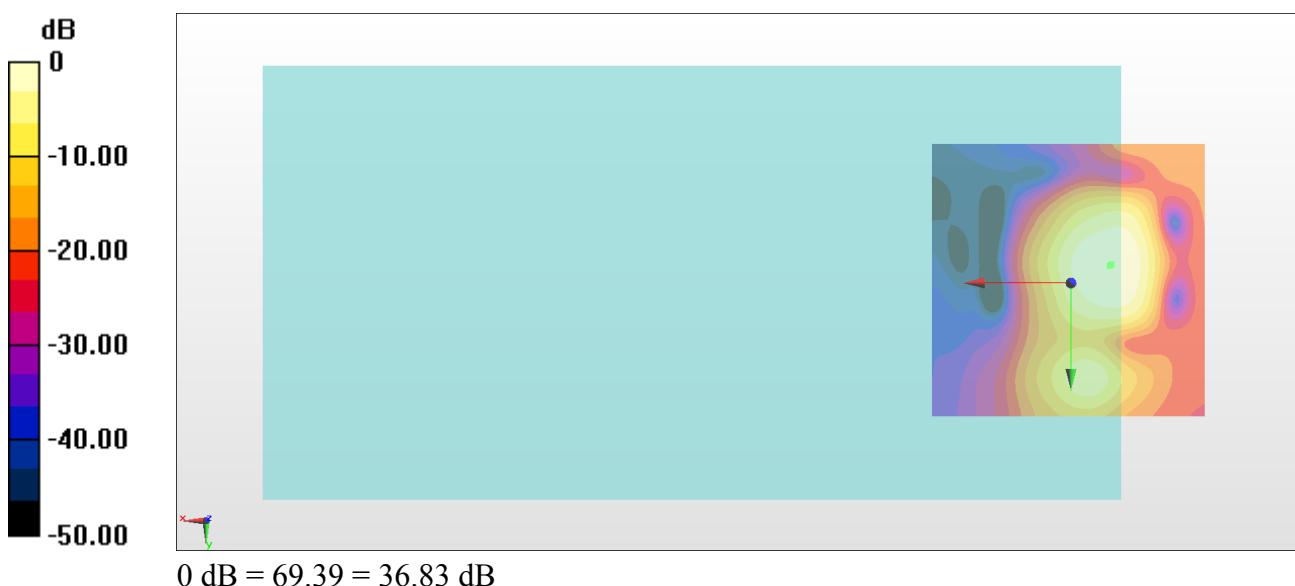
General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 36.83 dB

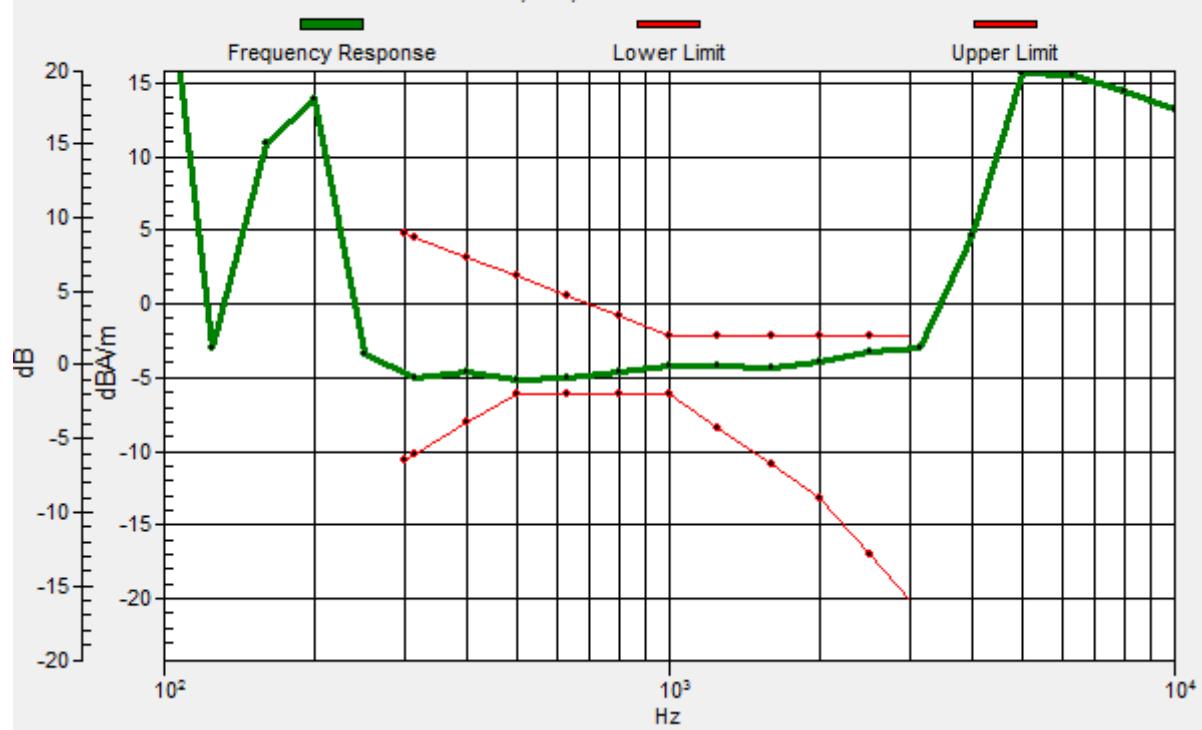
ABM1 comp = -2.22 dBA/m

Location: -7.2, -3.3, 3.7 mm



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

Loc: -7, -3.1, 3.7 mm Diff: 0.93dB



#16_HAC_T-Coil_WCDMA IV_HSPA_Ch1413_Transversal (Y)

Communication System: WCDMA; Frequency: 1732.6 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

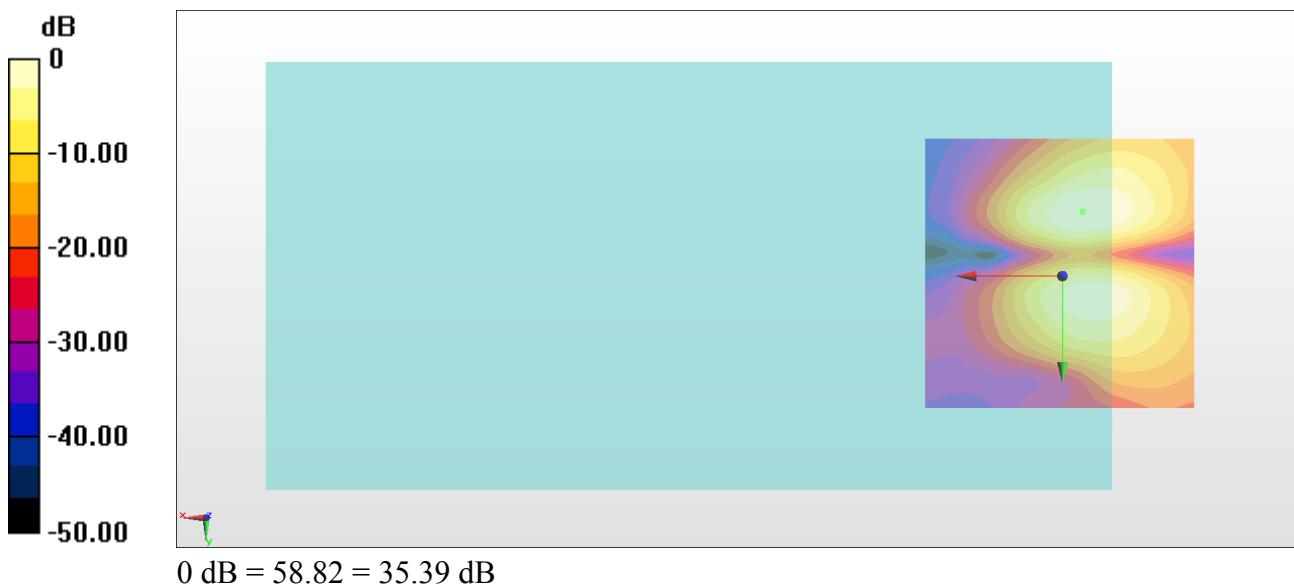
General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 35.39 dB

ABM1 comp = -5.80 dBA/m

Location: -3.7, -11.7, 3.7 mm



#17_HAC_T-Coil_WCDMA_V_HSPA_Ch4182_Axial (Z)

Communication System: WCDMA; Frequency: 836.4 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

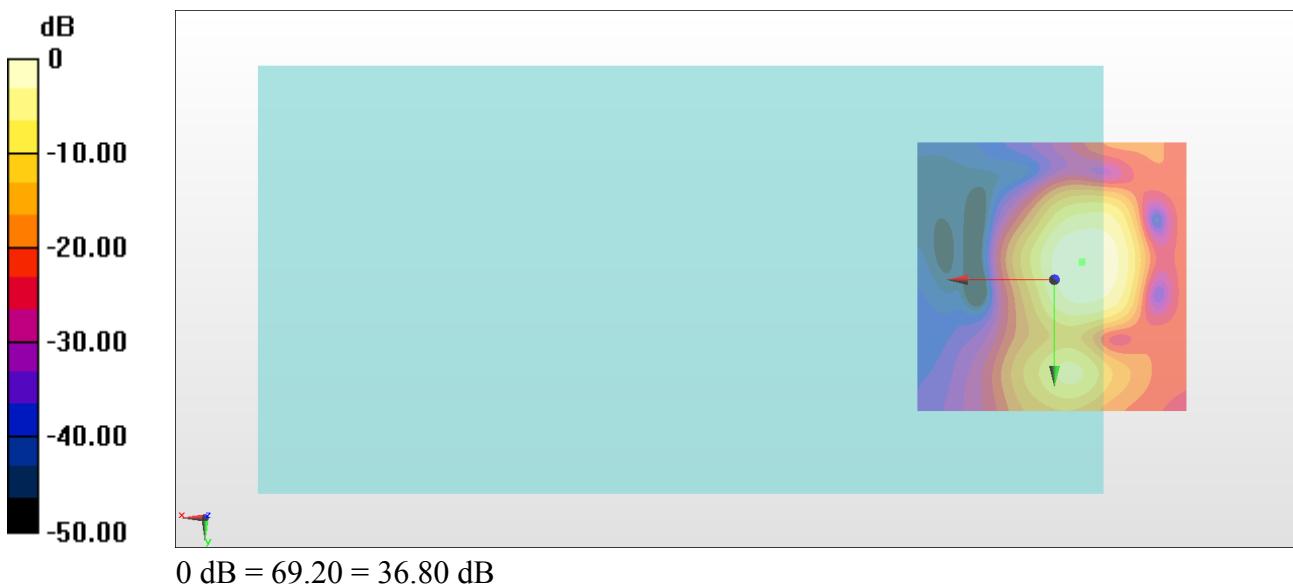
General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 36.80 dB

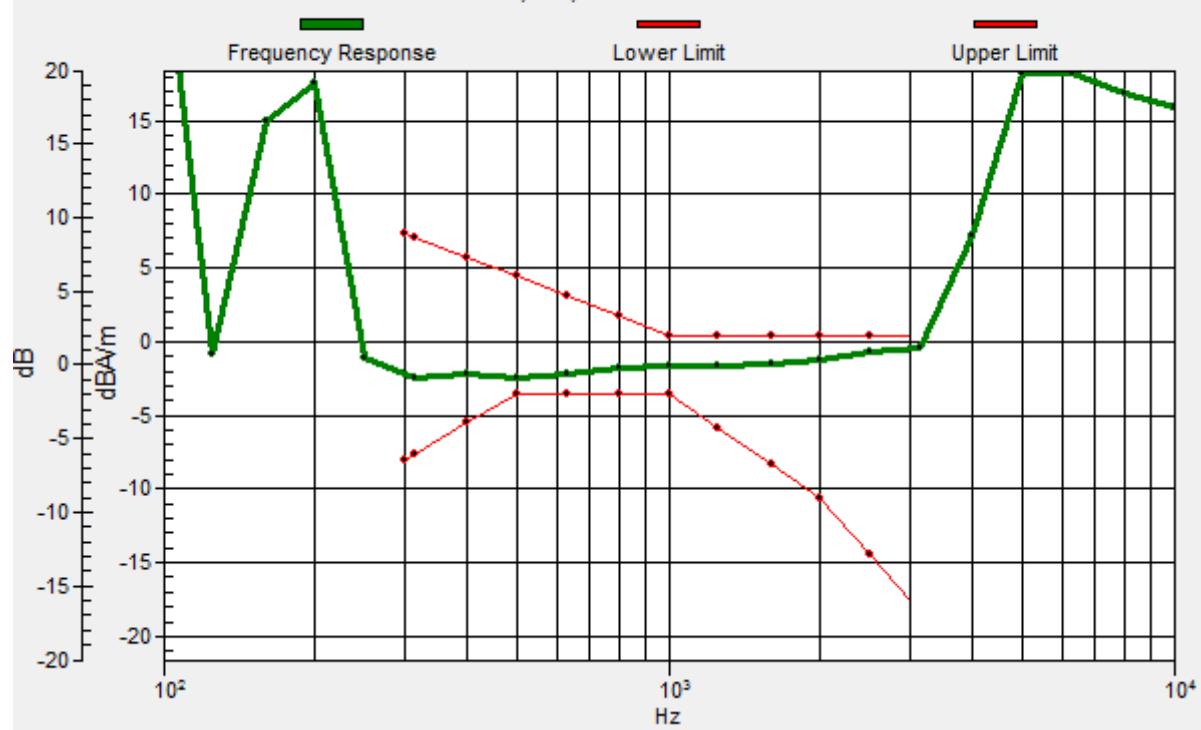
ABM1 comp = 0.38 dBA/m

Location: -5.1, -3.3, 3.7 mm



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

Loc: -5, -3.1, 3.7 mm Diff: 0.92dB



#17_HAC_T-Coil_WCDMA_V_HSPA_Ch4182_Transversal (Y)

Communication System: WCDMA; Frequency: 836.4 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

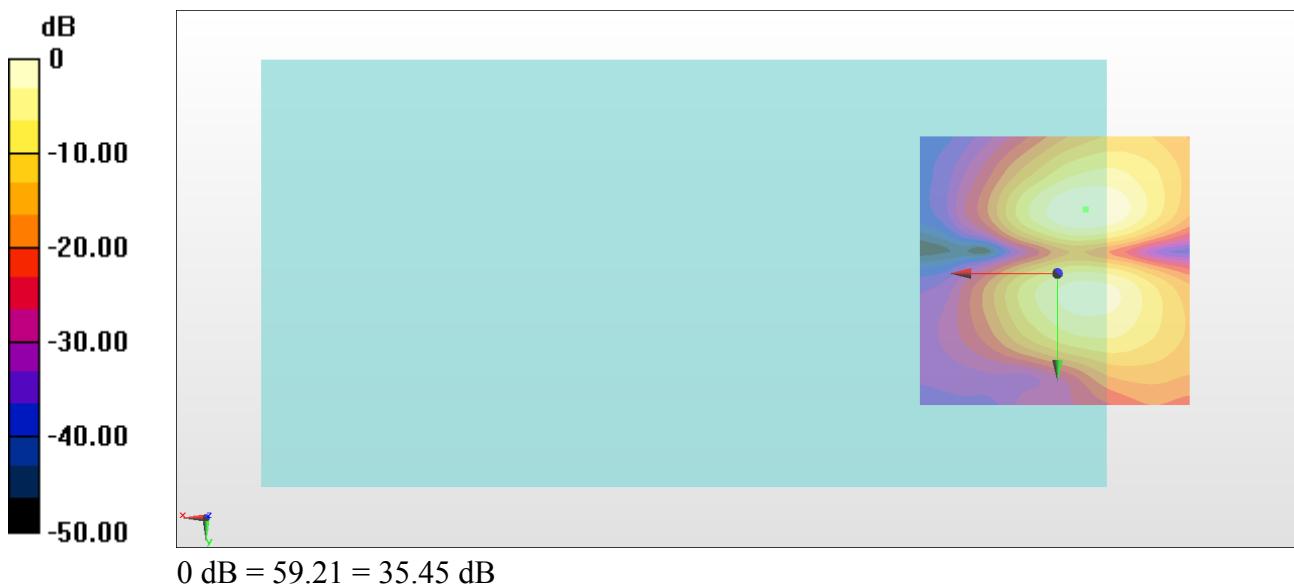
General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 35.45 dB

ABM1 comp = -7.34 dBA/m

Location: -5.1, -11.7, 3.7 mm



#18_HAC_T-Coil_LTE Band 2_20M_QPSK_1_0_Ch18900_Axial (Z)

Communication System: LTE; Frequency: 1880 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

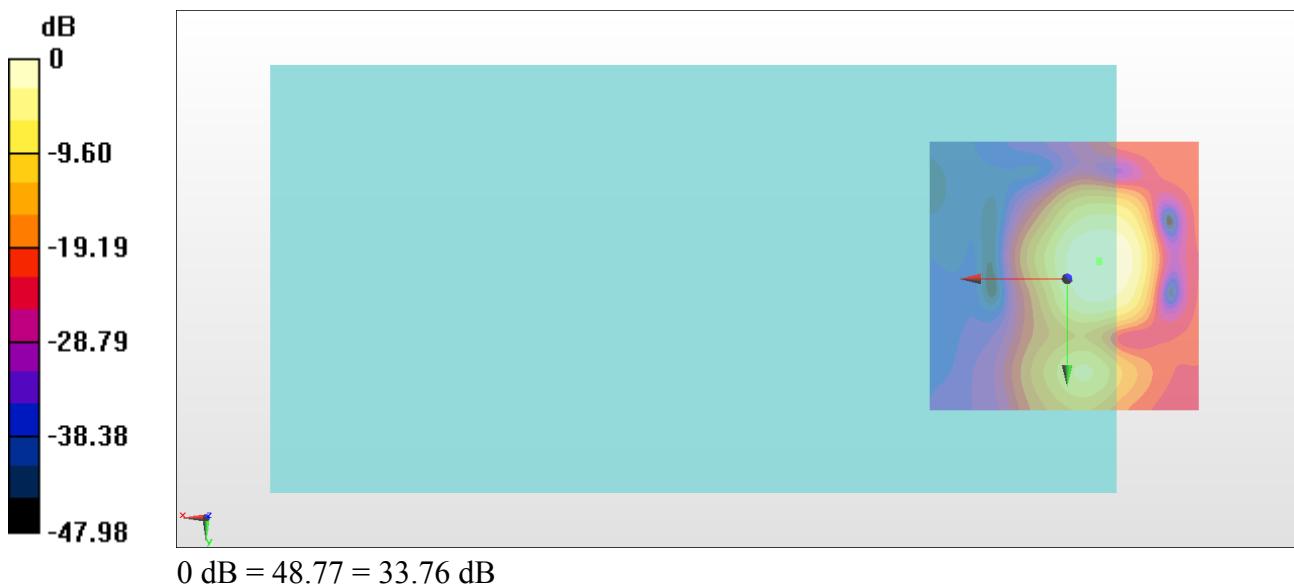
General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 33.76 dB

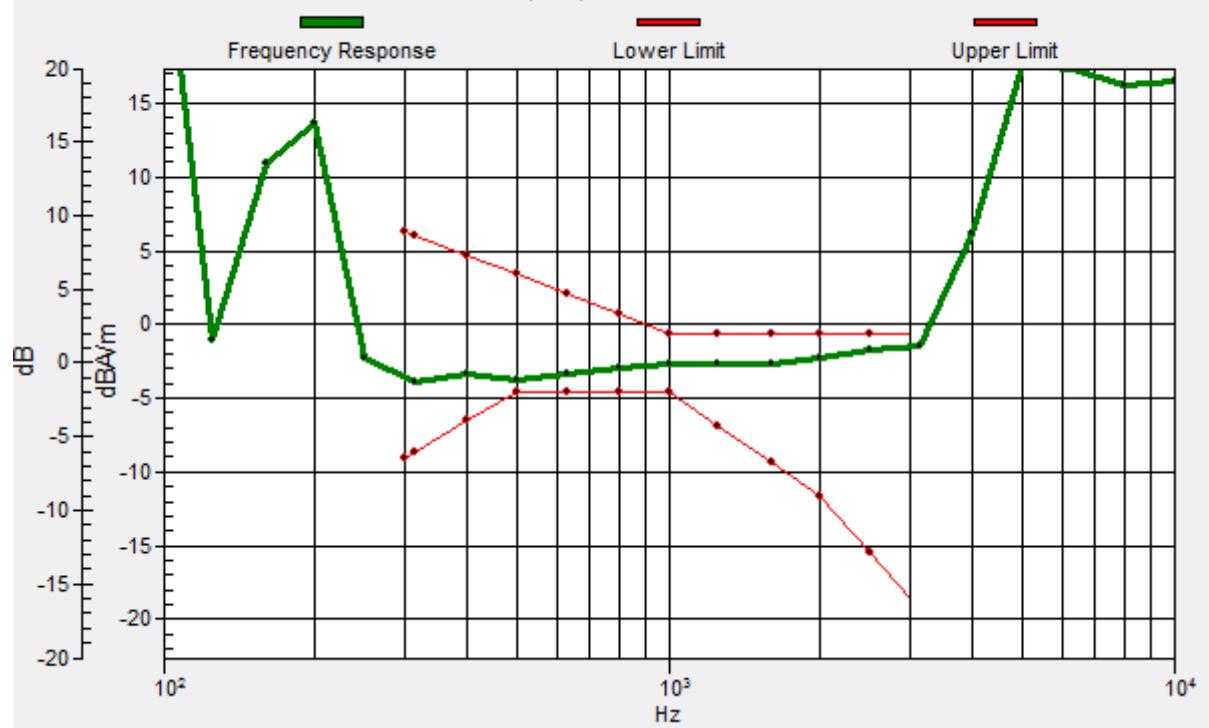
ABM1 comp = -0.19 dBA/m

Location: -5.8, -3.3, 3.7 mm



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

Loc: -5.9, -3.1, 3.7 mm Diff: 0.87dB



#18_HAC_T-Coil_LTE Band 2_20M_QPSK_1_0_Ch18900_Transversal (Y)

Communication System: LTE; Frequency: 1880 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 32.03 dB

ABM1 comp = -7.06 dBA/m

Location: -4.4, -11, 3.7 mm



#19_HAC_T-Coil_LTE Band 38_20M_QPSK_1_0_Ch38000_Axial (Z)

Communication System: LTE TDD; Frequency: 2595 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

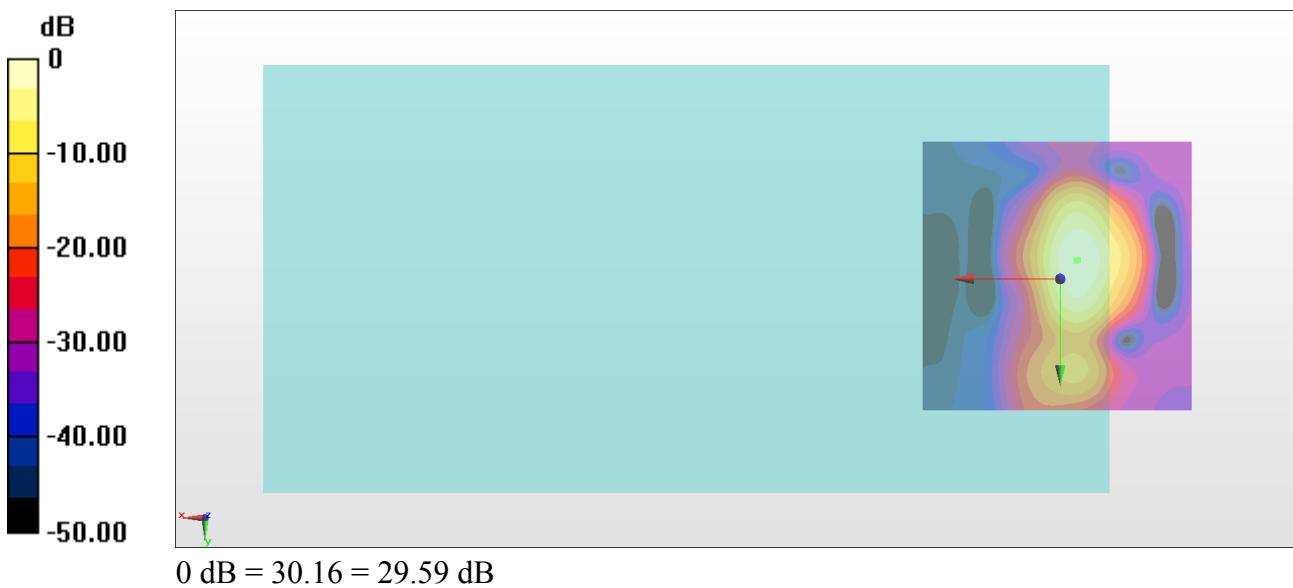
General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 29.59 dB

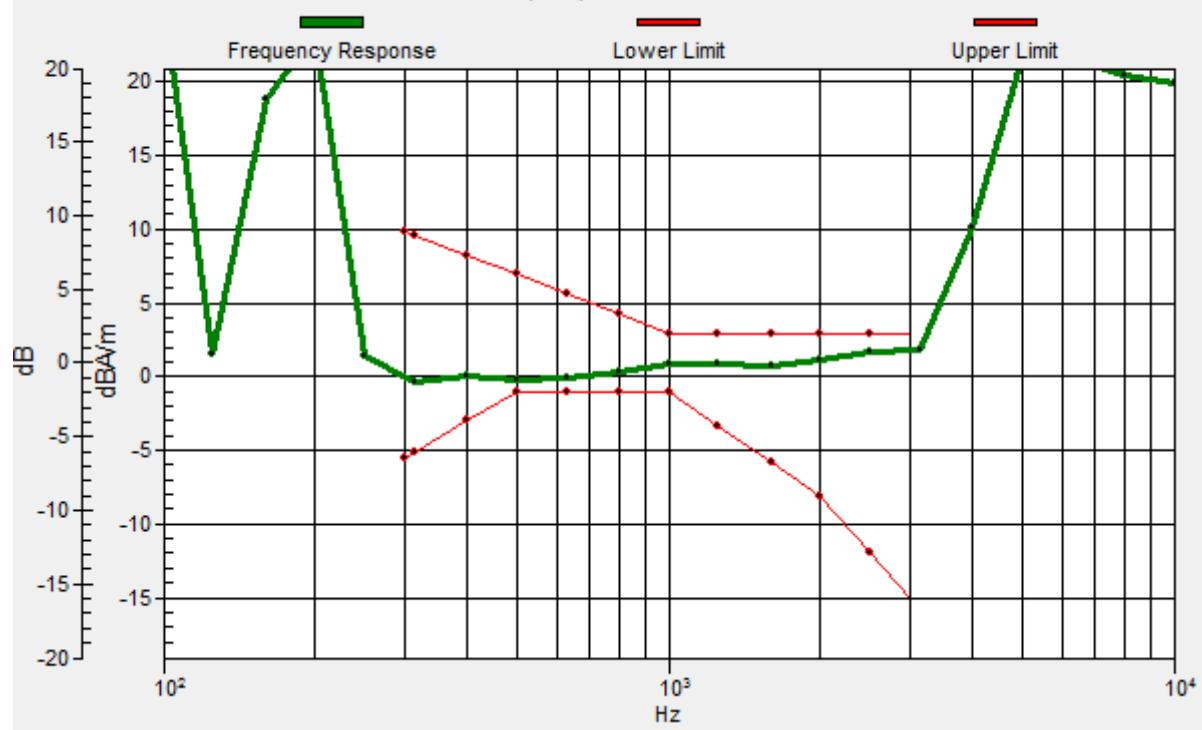
ABM1 comp = 2.93 dBA/m

Location: -3, -3.3, 3.7 mm



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

Loc: -3.2, -3.5, 3.7 mm Diff: 0.83dB



#19_HAC_T-Coil_LTE Band 38_20M_QPSK_1_0_Ch38000_Transversal (Y)

Communication System: LTE TDD; Frequency: 2595 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

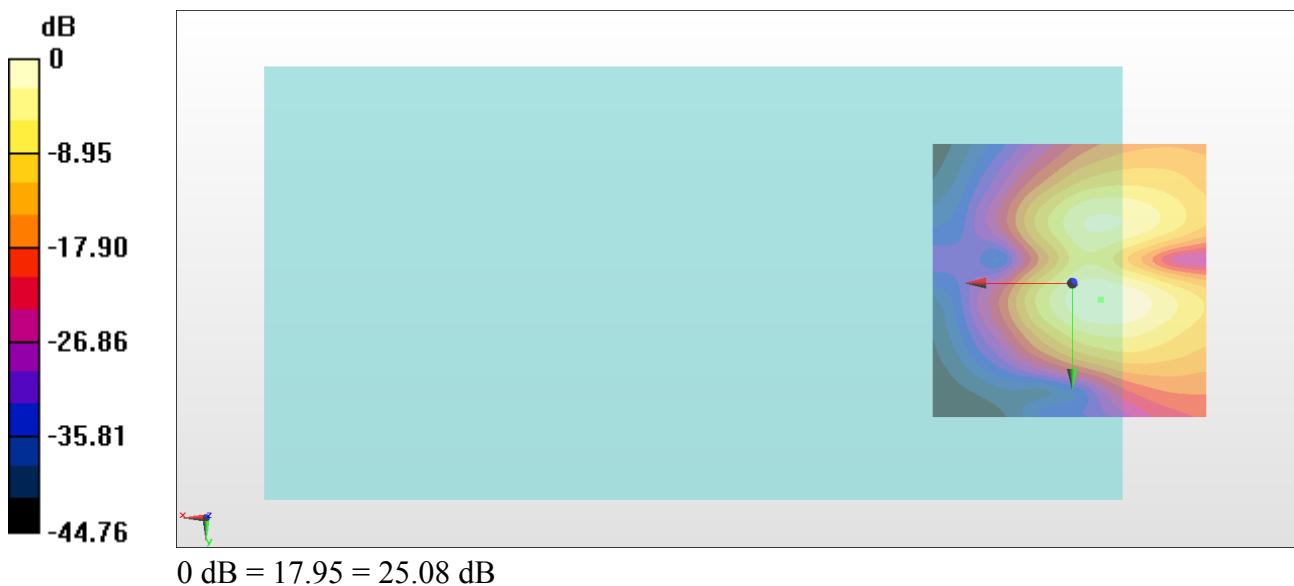
General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 25.08 dB

ABM1 comp = -4.88 dBA/m

Location: -5.1, 3, 3.7 mm



#20_HAC_T-Coil_WLAN2.4GHz_802.11b 1Mbps_Ch6_Axial (Z)

Communication System: 802.11b ; Frequency: 2437 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated

grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 35.48 dB

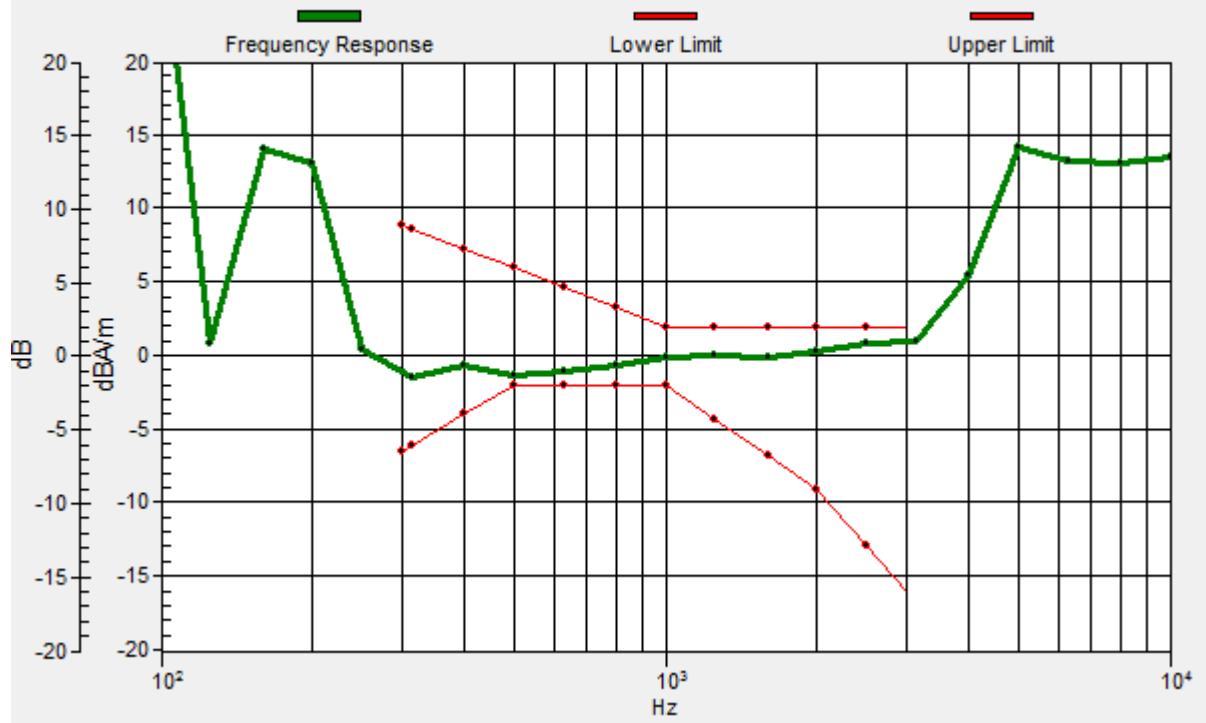
ABM1 comp = 1.02 dBA/m

Location: -3, -4, 3.7 mm



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

Loc: -2.8, -4, 3.7 mm Diff: 0.67dB



#20_HAC_T-Coil_WLAN2.4GHz_802.11b 1Mbps_Ch6_Transversal (Y)

Communication System: 802.11b ; Frequency: 2437 MHz

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

Ambient Temperature : 23.5 °C

DASY5 Configuration:

- Probe: AM1DV3 - 3130; ; Calibrated: 2017/11/21
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn854; Calibrated: 2018/6/14
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (0);SEMCAD X Version 14.6.10 (7417)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

ABM1/ABM2 = 31.39 dB

ABM1 comp = -6.73 dBA/m

Location: -3.7, 9.3, 3.7 mm

