



REPORT No. : SZ20010192S02

## Annex C Plots of T-Coil Test Results

### HAC\_T-Coil\_GSM850\_GSM Voice\_Ch189\_Z

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch189/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

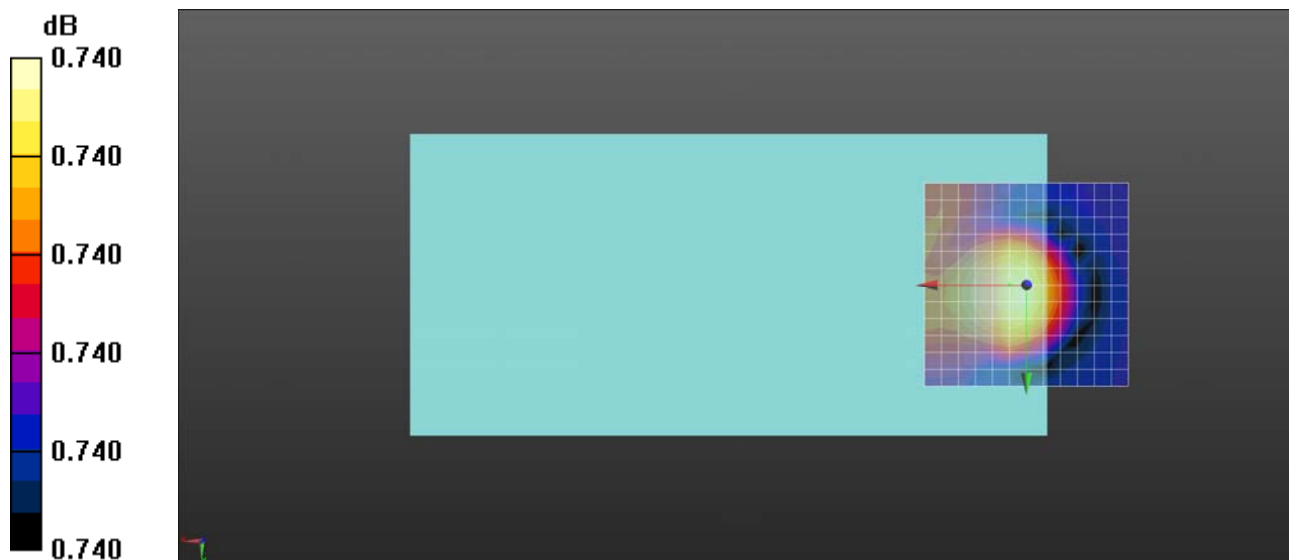
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 34.46 dB

ABM1 comp = -6.84 dBA/m

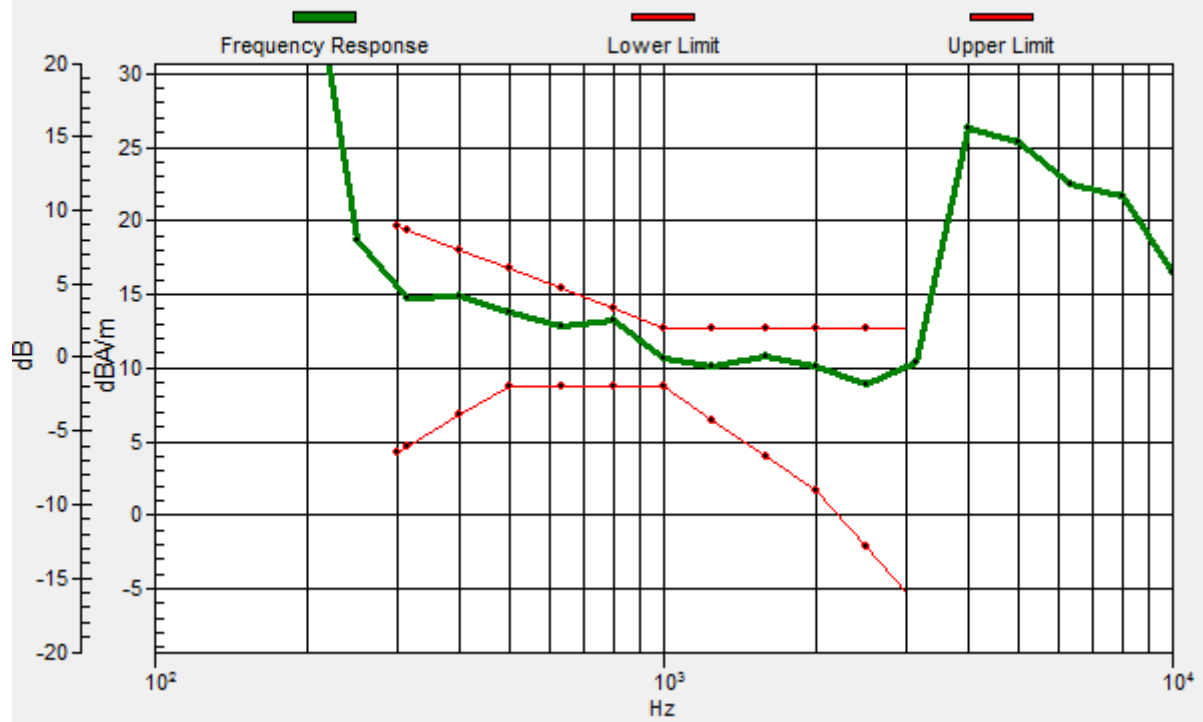
BWC Factor = 0.0086 dB

Location: 0, 0, 3.7 mm



# Ch189/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, 0, 3.7 mm Diff: 0.74dB



### HAC\_T-Coil\_GSM850\_GSM Voice\_Ch189\_Y

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch189/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid:

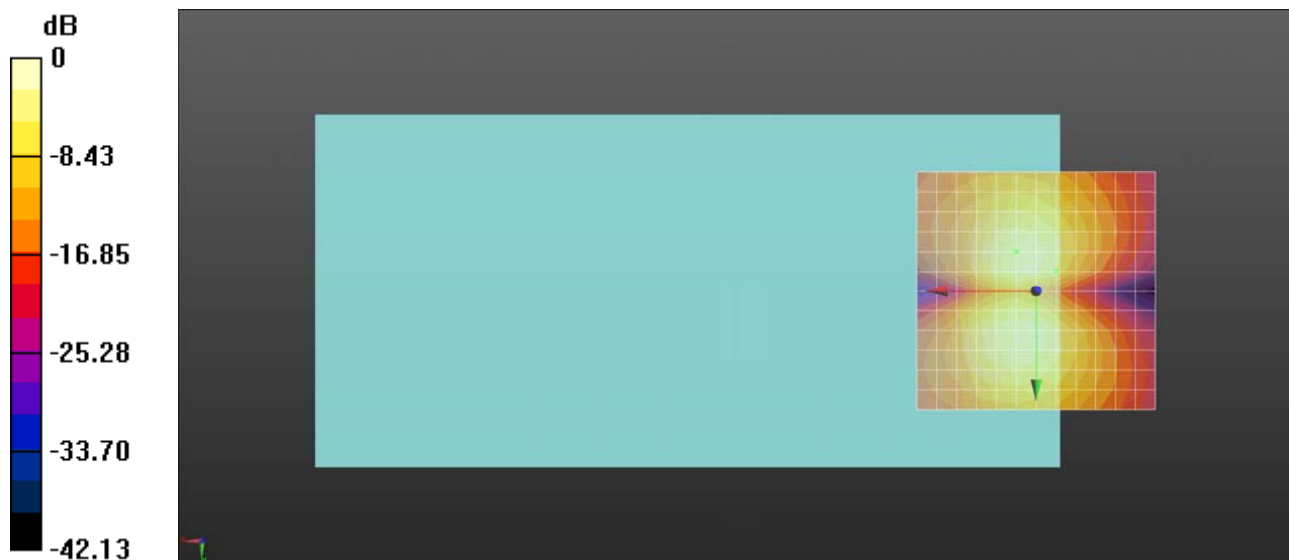
dx=10mm, dy=10mm

ABM1/ABM2 = 38.51 dB

ABM1 comp = 0.95 dBA/m

BWC Factor = 0.0086 dB

Location: -4.2, -4.2, 3.7 mm



0 dB = 84.21 = 38.51 dB

### HAC\_T-Coil\_GSM1900\_GSM Voice\_Ch661\_Z

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch661/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

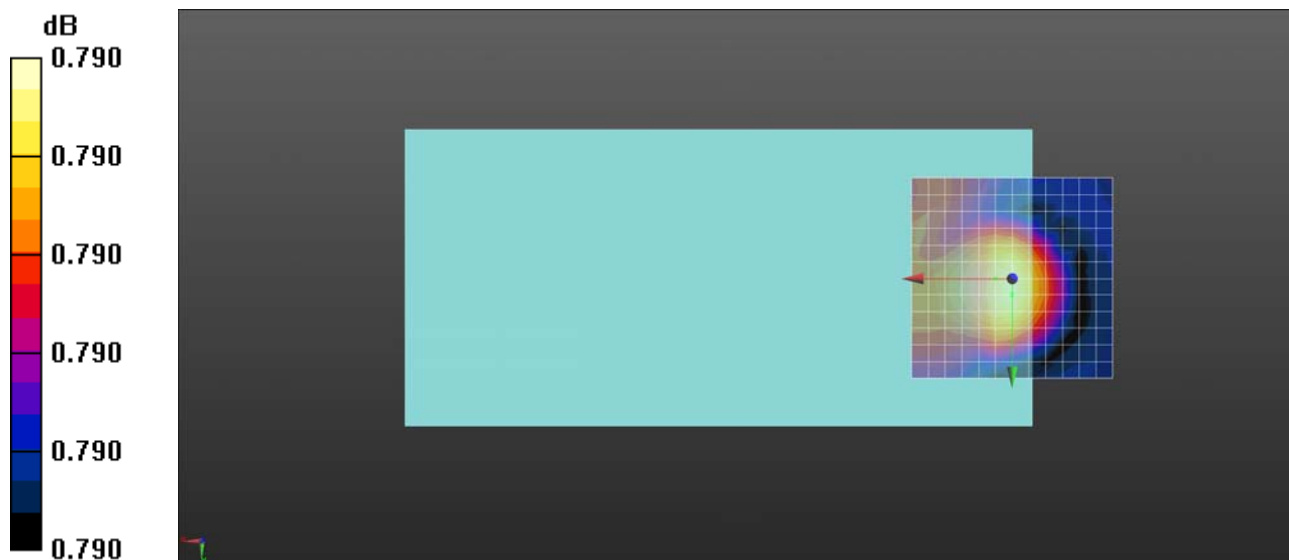
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 31.04 dB

ABM1 comp = -6.31 dBA/m

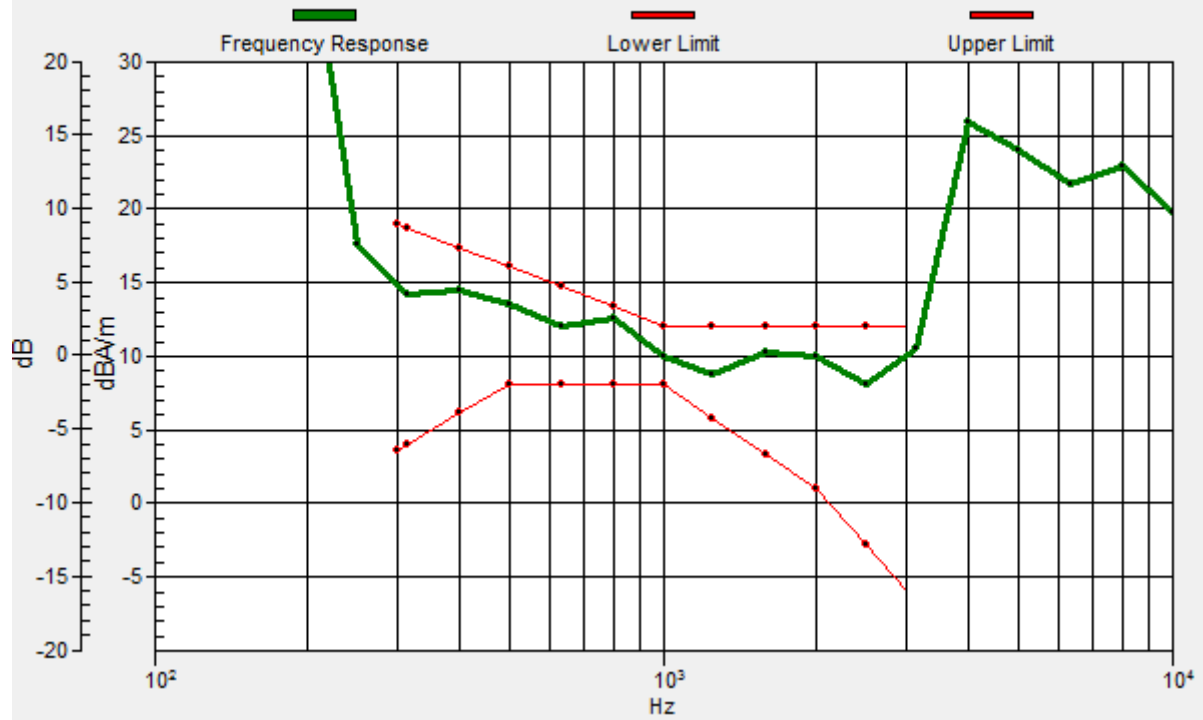
BWC Factor = -0.0061 dB

Location: 0, 4.2, 3.7 mm



# Ch661/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, 4.2, 3.7 mm Diff: 0.79dB



### HAC\_T-Coil\_GSM1900\_GSM Voice\_Ch661\_Y

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch661/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):** Measurement grid:

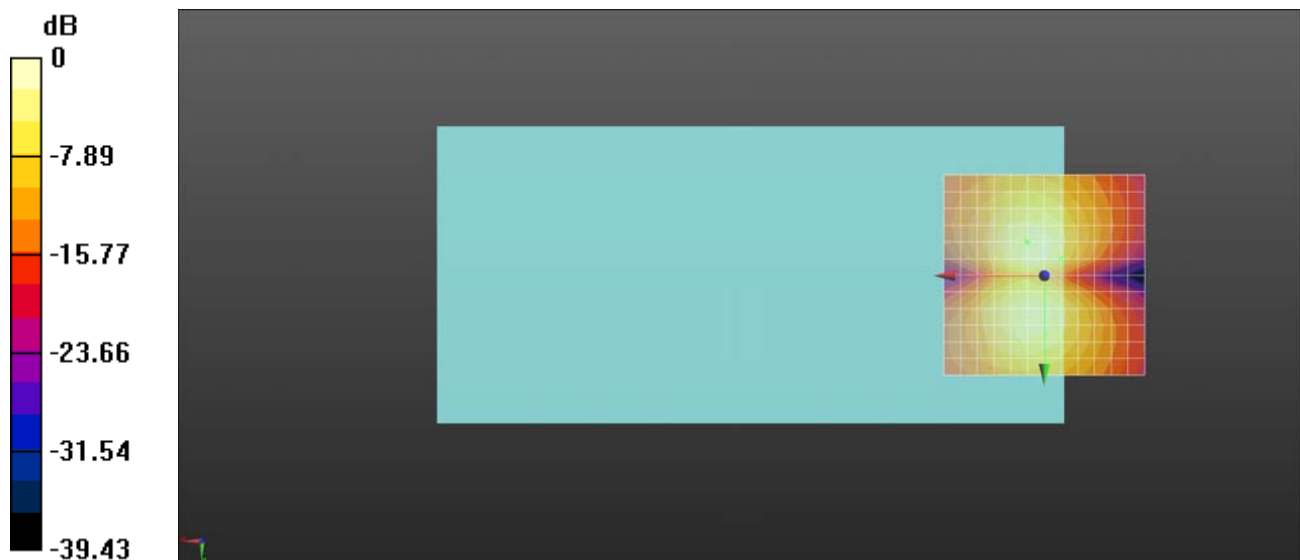
dx=10mm, dy=10mm

ABM1/ABM2 = 39.73 dB

ABM1 comp = 0.93 dBA/m

BWC Factor = -0.0061 dB

Location: -4.2, -4.2, 3.7 mm



0 dB = 96.95 = 39.73 dB

### HAC\_T-Coil\_WCDMA Band II AMR 12.12Kbps\_Ch9400\_Z

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch9400/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

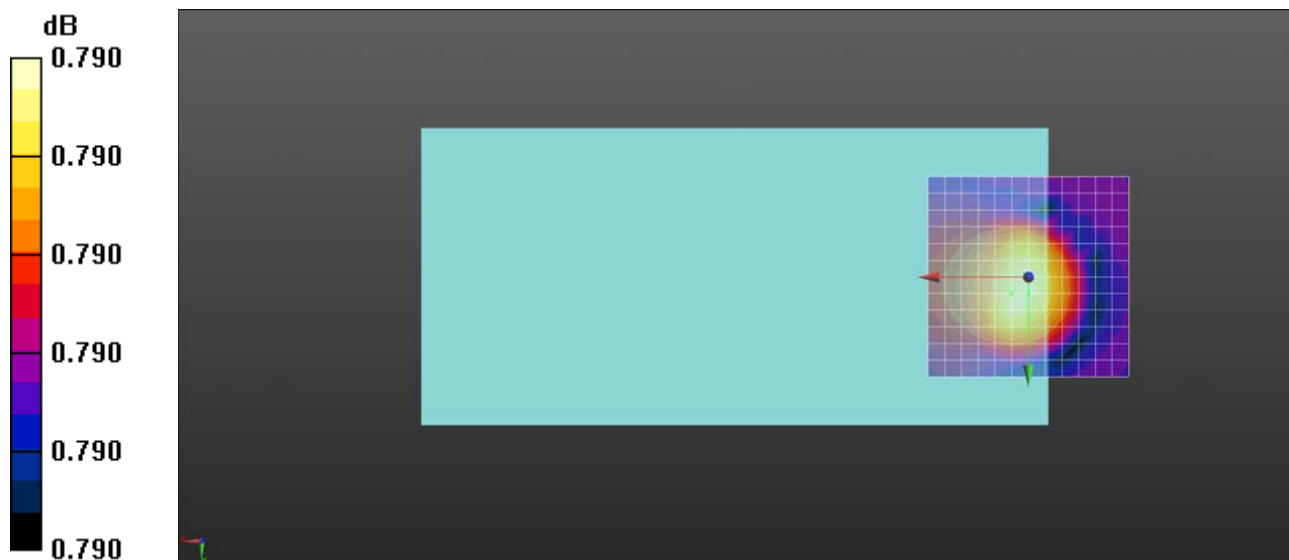
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 45.81 dB

ABM1 comp = -6.06 dBA/m

BWC Factor = -0.01 dB

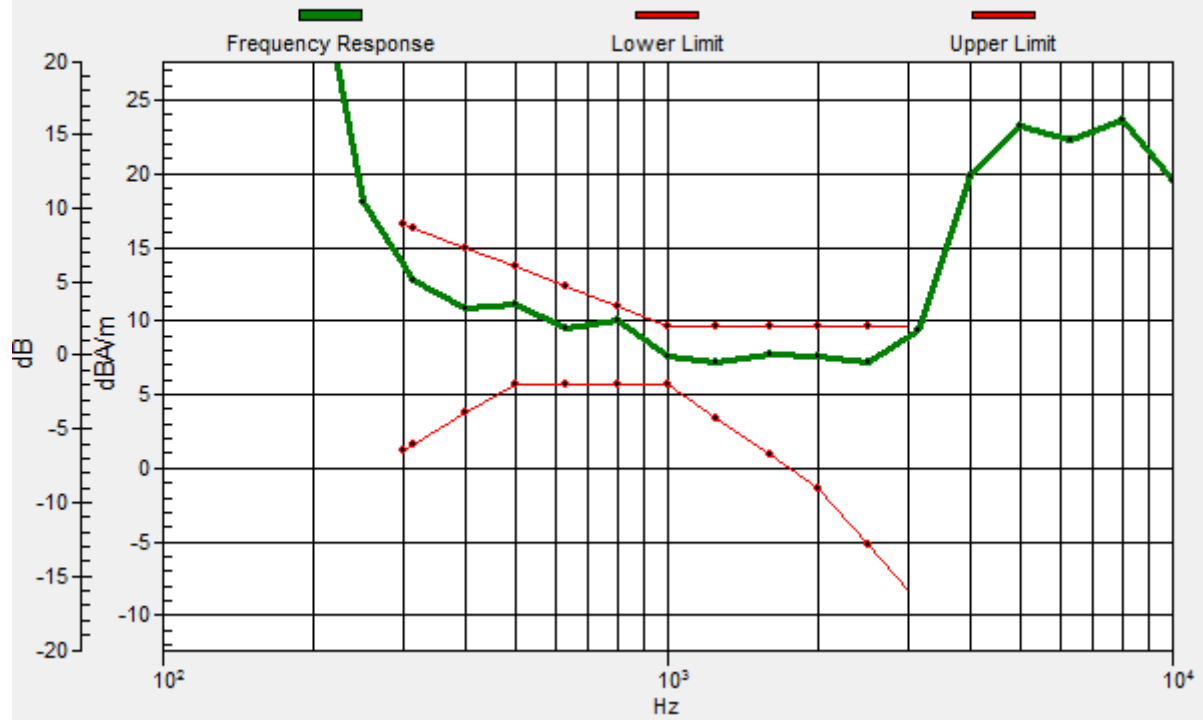
Location: 0, 4.2, 3.7 mm





# Ch9400/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, 4.2, 3.7 mm Diff: 0.79dB



### HAC\_T-Coil\_WCDMA Band II AMR 12.12Kbps\_Ch9400\_Y

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch9400/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):** Measurement grid:

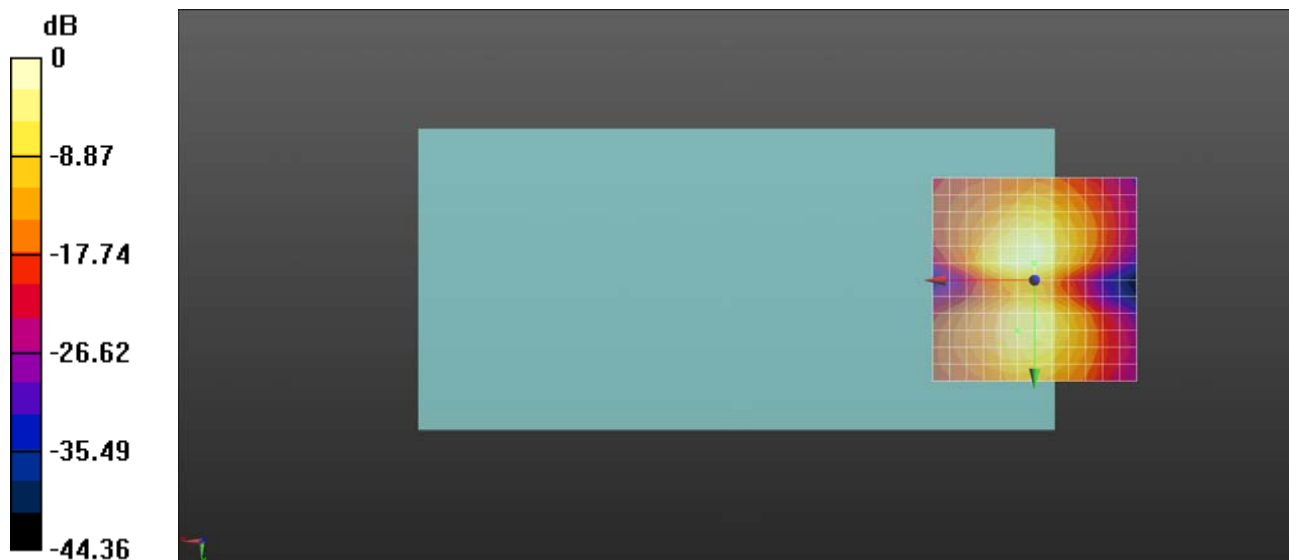
dx=10mm, dy=10mm

ABM1/ABM2 = 38.43 dB

ABM1 comp = -13.49 dBA/m

BWC Factor = -0.01 dB

Location: 0, -4.2, 3.7 mm



0 dB = 83.46 = 38.43 dB

## HAC\_T-Coil\_WCDMA Band IV AMR 12.12Kbps\_Ch1413\_Z

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

### Ch1413/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

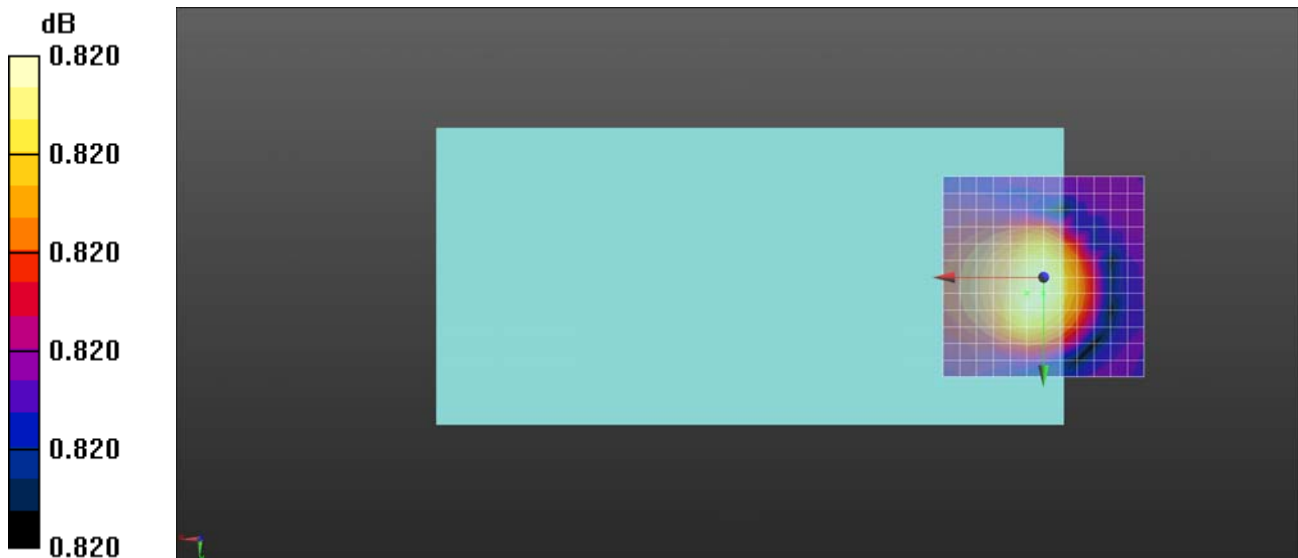
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 46.09 dB

ABM1 comp = -6.08 dBA/m

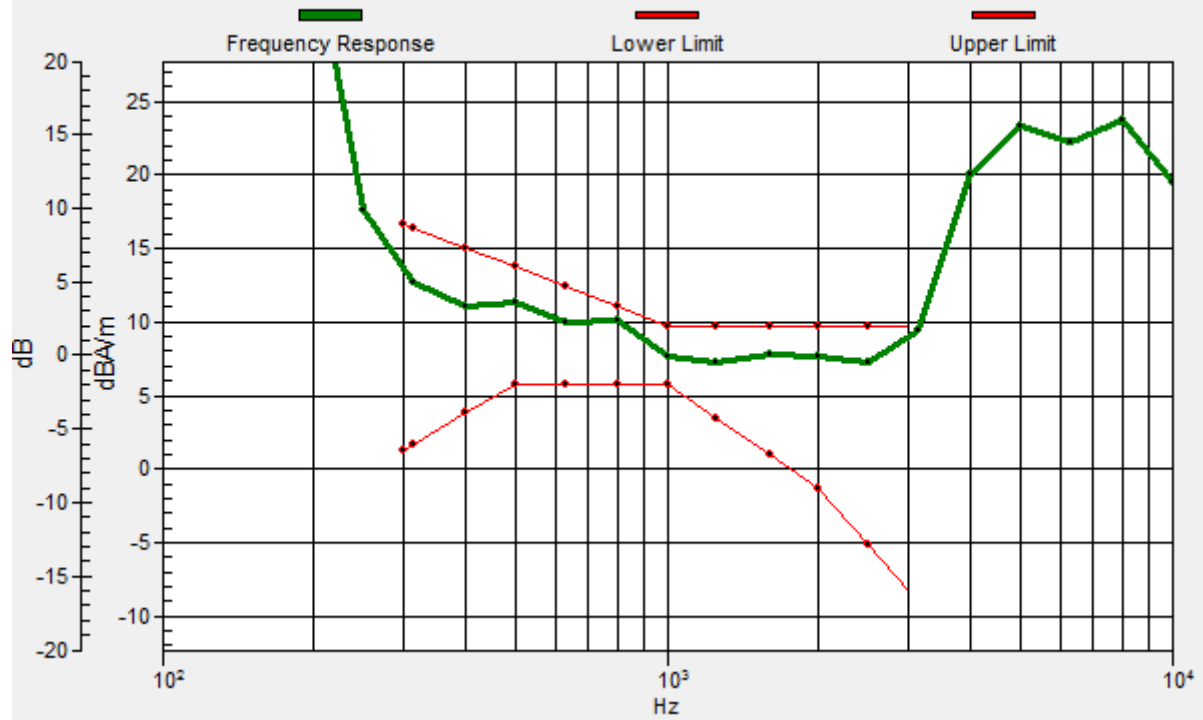
BWC Factor = -0.01 dB

Location: 0, 4.2, 3.7 mm



# Ch1413/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, 4.2, 3.7 mm Diff: 0.82dB



### HAC\_T-Coil\_WCDMA Band IV AMR 12.12Kbps\_Ch1413\_Y

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch1413/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):** Measurement grid:

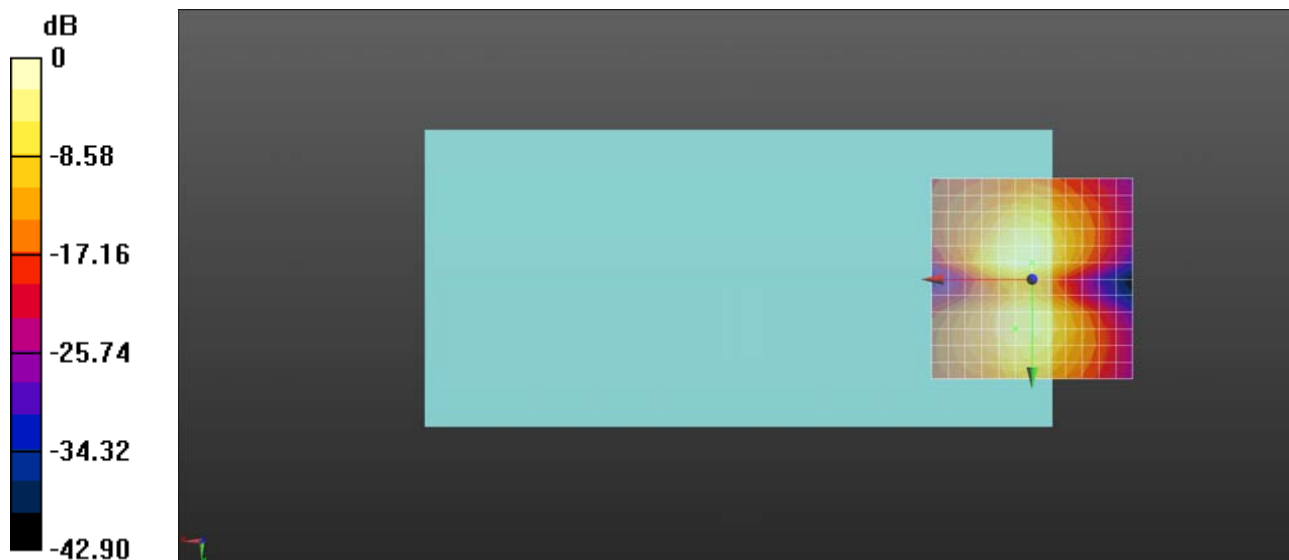
dx=10mm, dy=10mm

ABM1/ABM2 = 38.50 dB

ABM1 comp = -13.56 dBA/m

BWC Factor = -0.01 dB

Location: 0, -4.2, 3.7 mm



0 dB = 84.10 = 38.50 dB

### HAC\_T-Coil\_WCDMA Band V AMR 12.12Kbps\_Ch4183\_Z

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch4183/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

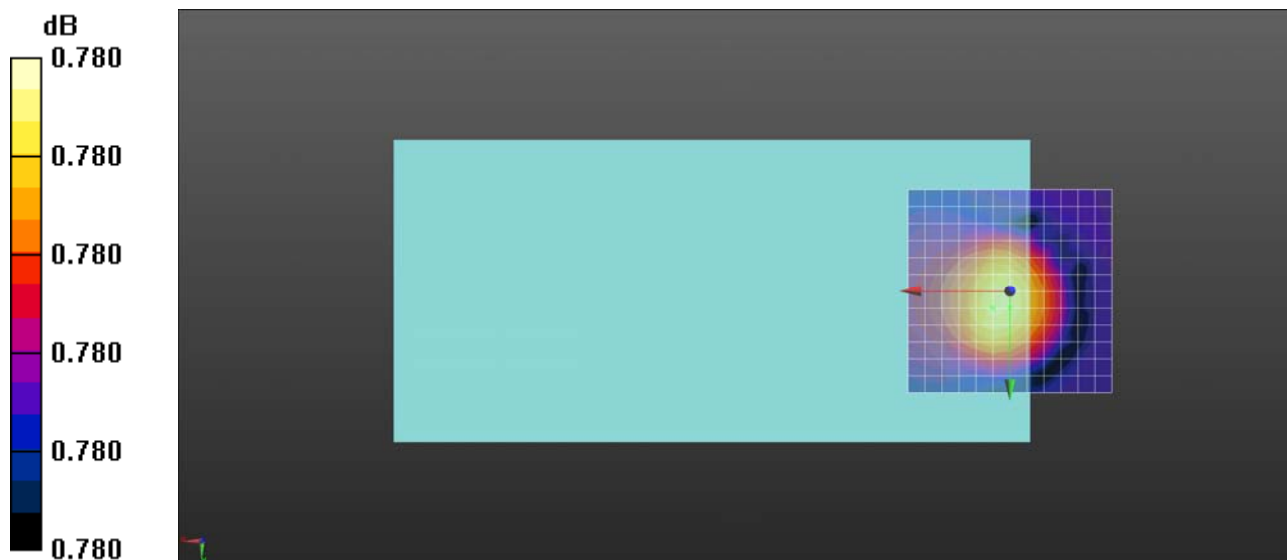
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 46.08 dB

ABM1 comp = -6.11 dBA/m

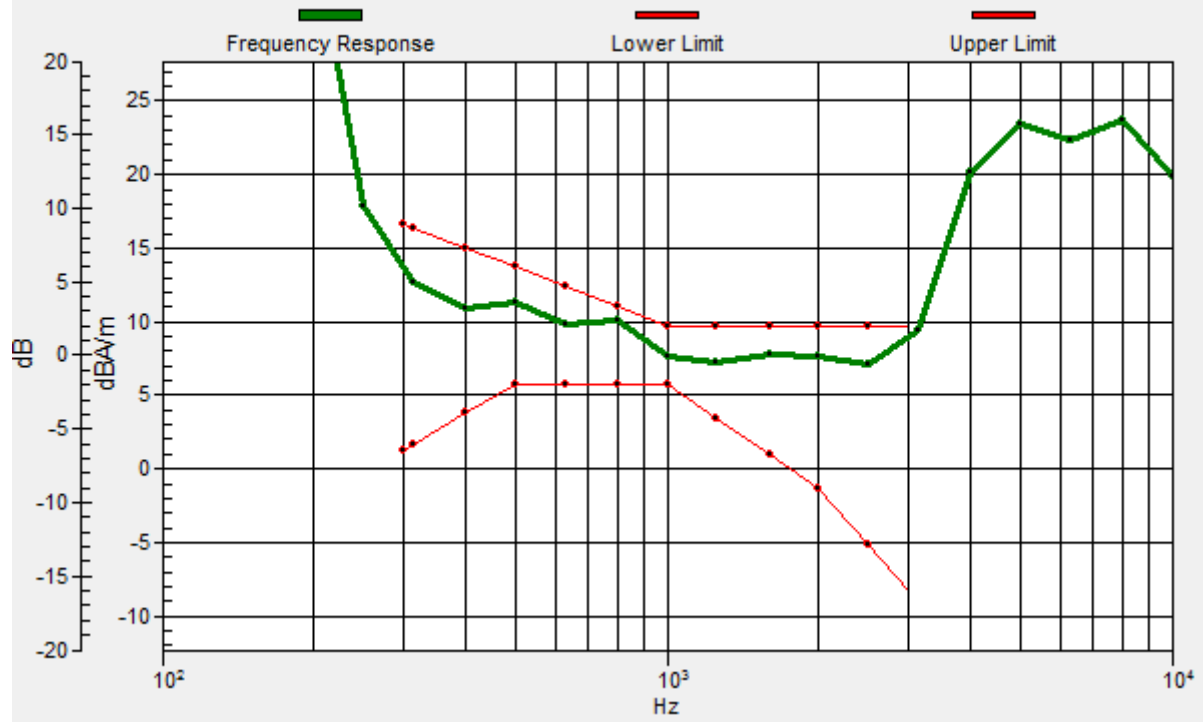
BWC Factor = -0.01 dB

Location: 0, 4.2, 3.7 mm



# Ch4183/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, 4.2, 3.7 mm Diff: 0.78dB



### HAC\_T-Coil\_WCDMA Band V AMR 12.12Kbps\_Ch4183\_Y

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch4183/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):** Measurement grid:

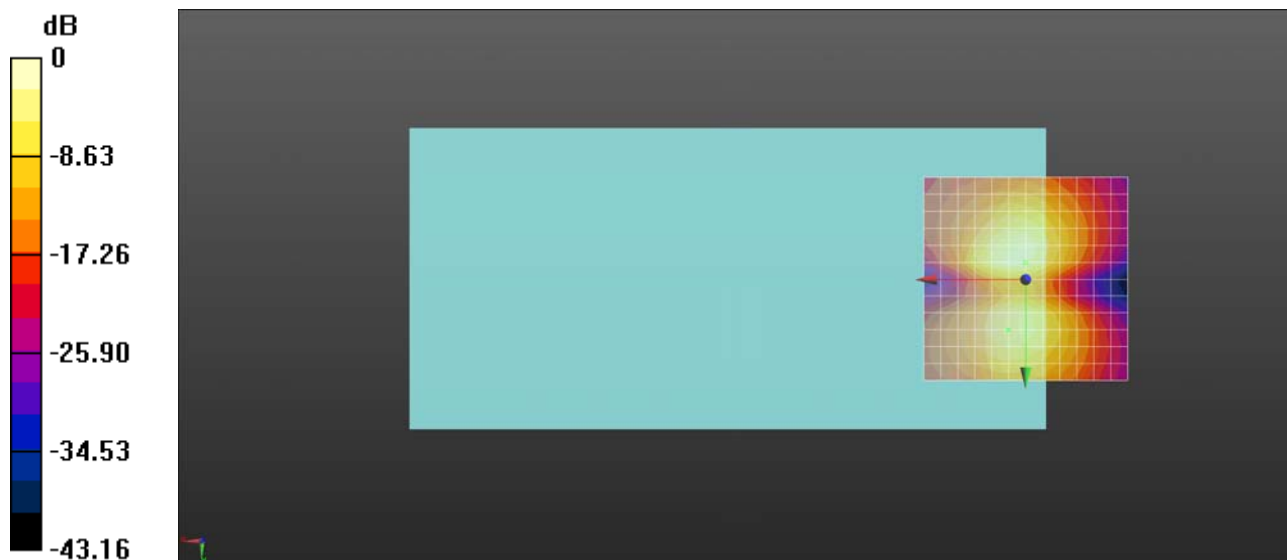
dx=10mm, dy=10mm

ABM1/ABM2 = 37.76 dB

ABM1 comp = -13.68 dBA/m

BWC Factor = -0.01 dB

Location: 0, -4.2, 3.7 mm



0 dB = 77.28 = 37.76 dB



### HAC\_T-Coil\_CDMA2000\_BC0\_RC1\_SO3\_Ch384\_Z

Communication System: UID 10295 - AAB, CDMA2000, RC1, SO3, 1/8th Rate 25 fr.; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch384/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

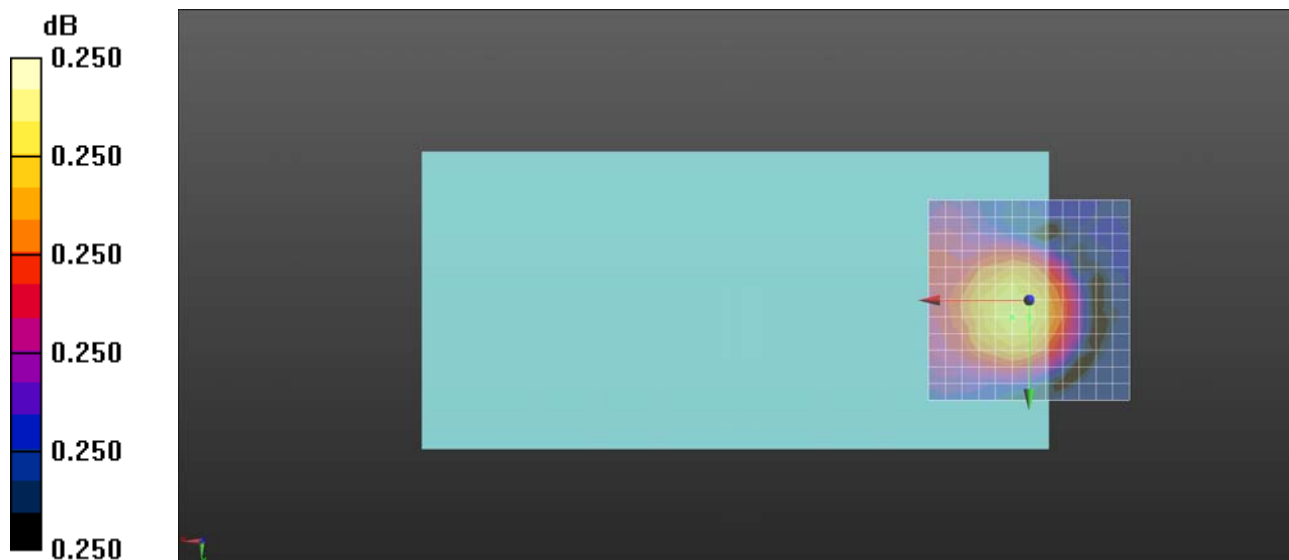
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 50.25 dB

ABM1 comp = -7.81 dBA/m

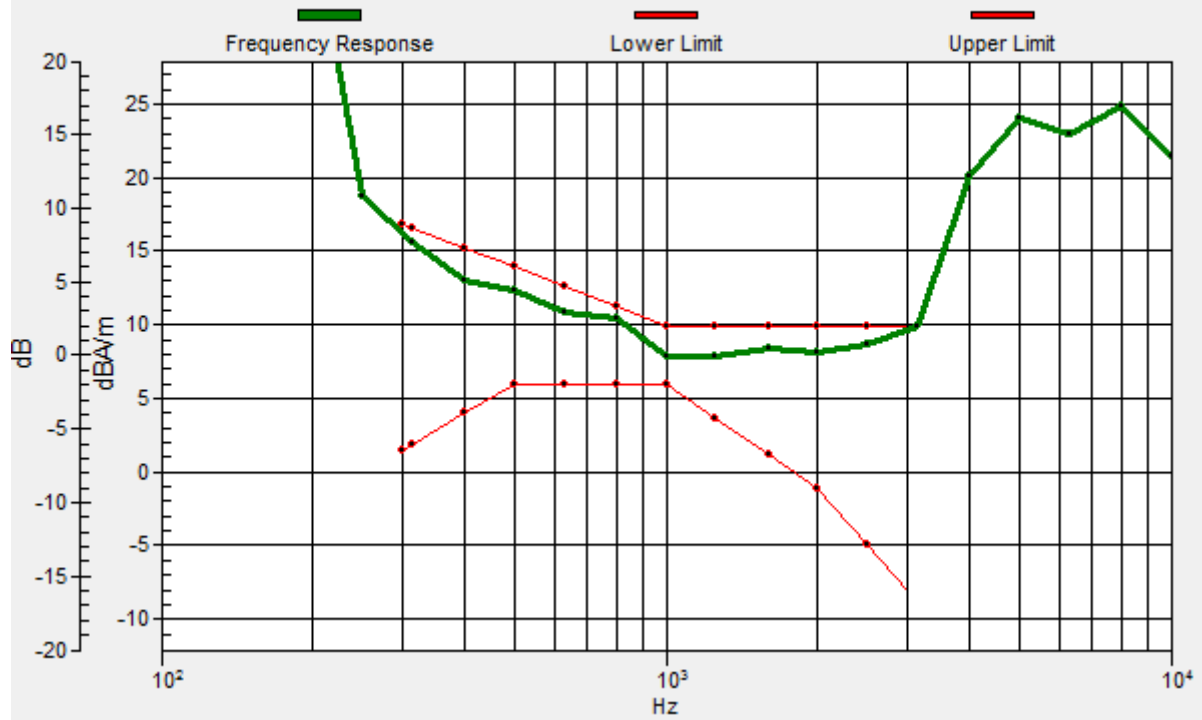
BWC Factor = -0.01 dB

Location: 0, 4.2, 3.7 mm



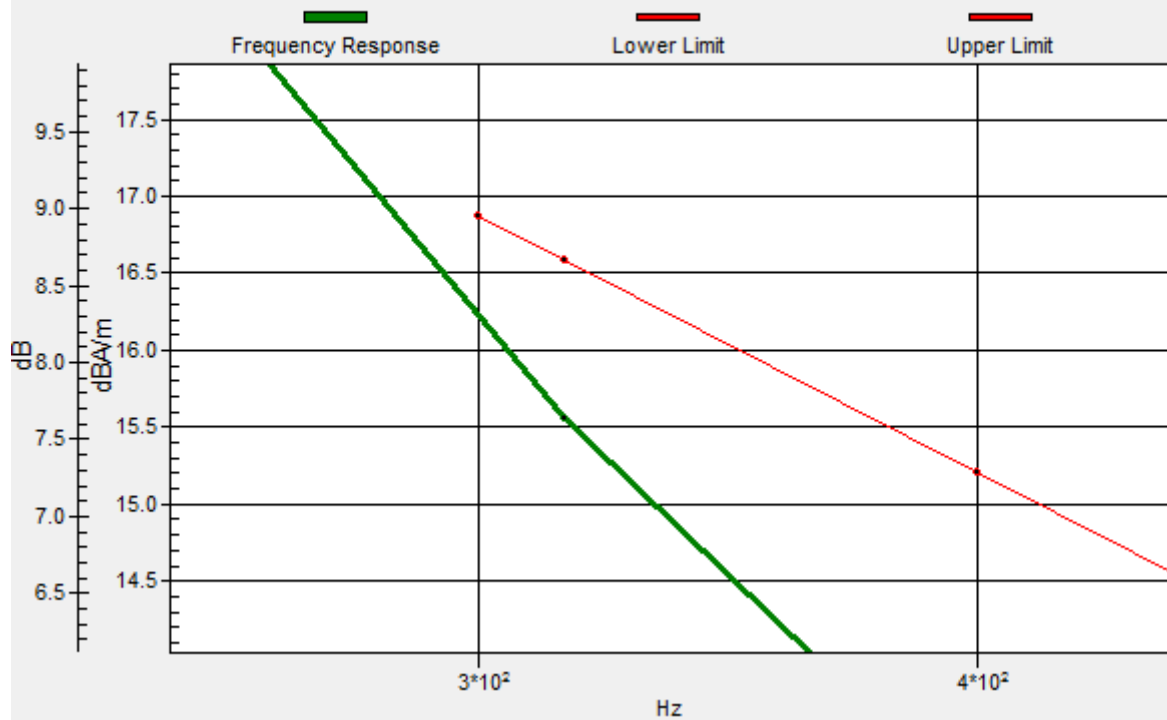
### Ch384/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, 4.2, 3.7 mm Diff: 0.25dB



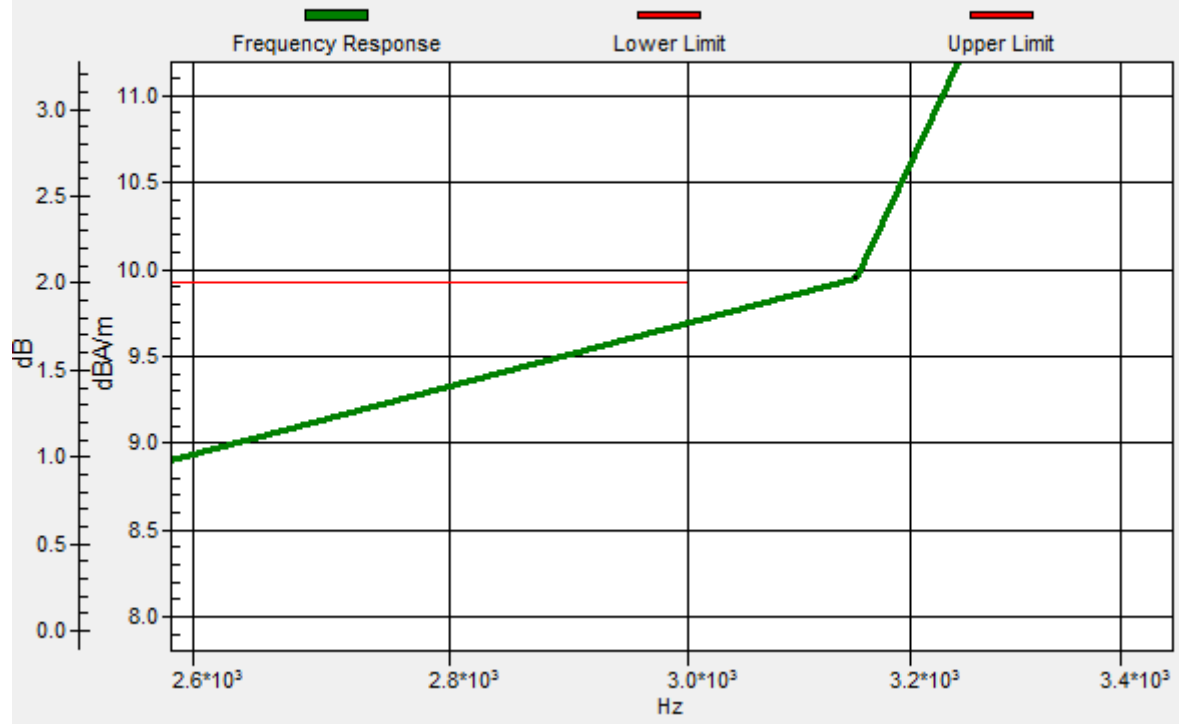
### Ch384/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, 4.2, 3.7 mm Diff: 0.25dB



# Ch384/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, 4.2, 3.7 mm Diff: 0.25dB



### HAC\_T-Coil\_CDMA2000 BC0\_RC1 SO3\_Ch384\_Y

Communication System: UID 10295 - AAB, CDMA2000, RC1, SO3, 1/8th Rate 25 fr.; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch384/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid:

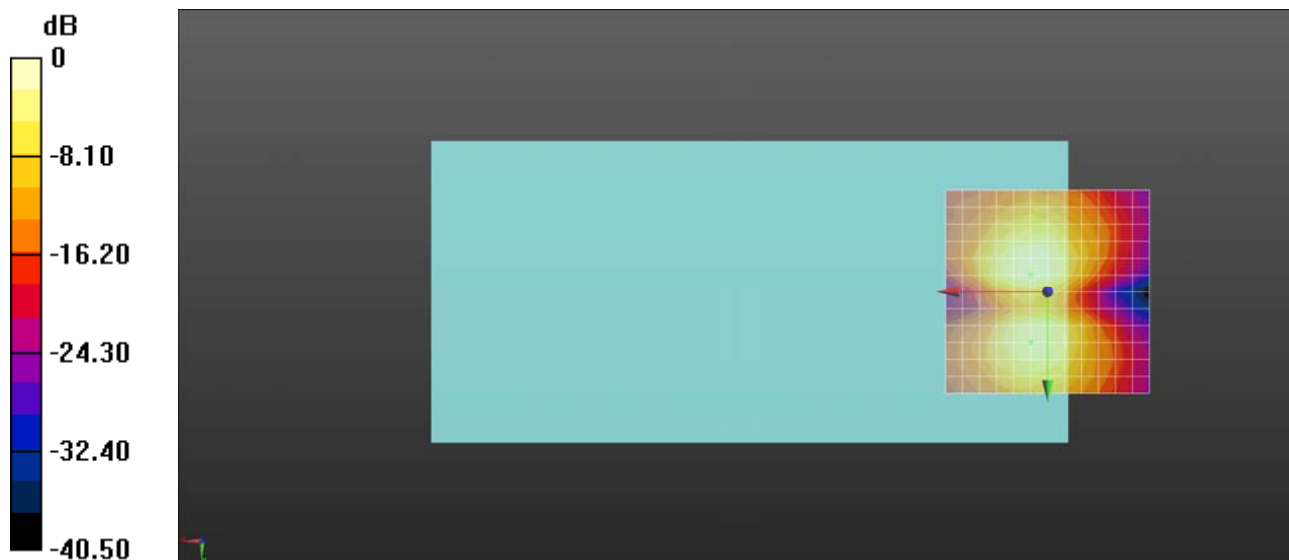
dx=10mm, dy=10mm

ABM1/ABM2 = 53.51 dB

ABM1 comp = 5.50 dBA/m

BWC Factor = -0.01 dB

Location: 4.2, -4.2, 3.7 mm



0 dB = 473.8 = 53.51 dB

### HAC\_T-Coil\_CDMA2000 BC1\_RC1 SO3\_Ch600\_Z

Communication System: UID 10276 - CAB, CDMA2000 (1xRTT, RC1, 1/8 Rate); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch600/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

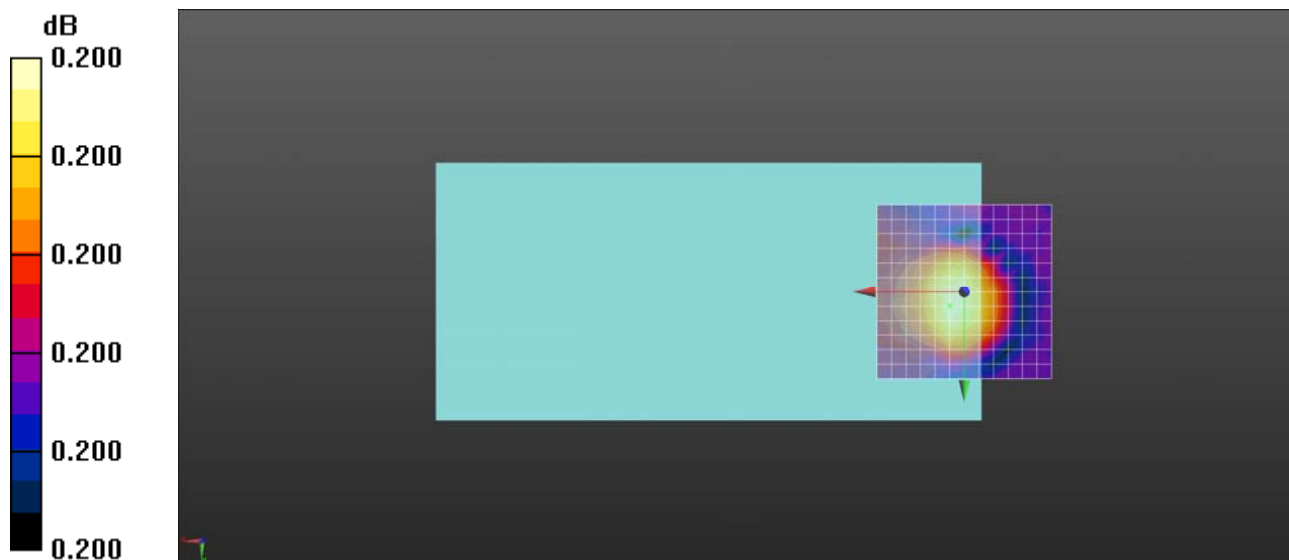
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 45.64 dB

ABM1 comp = -4.77 dBA/m

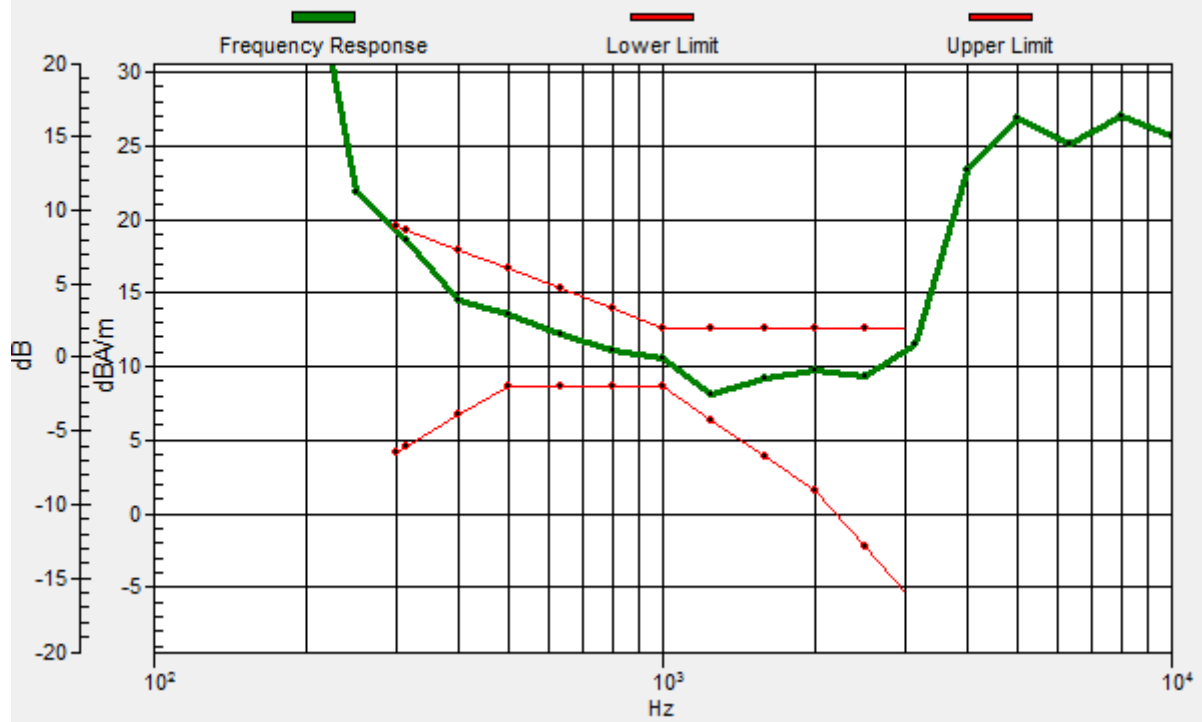
BWC Factor = 0.0089 dB

Location: 4.2, 4.2, 3.7 mm



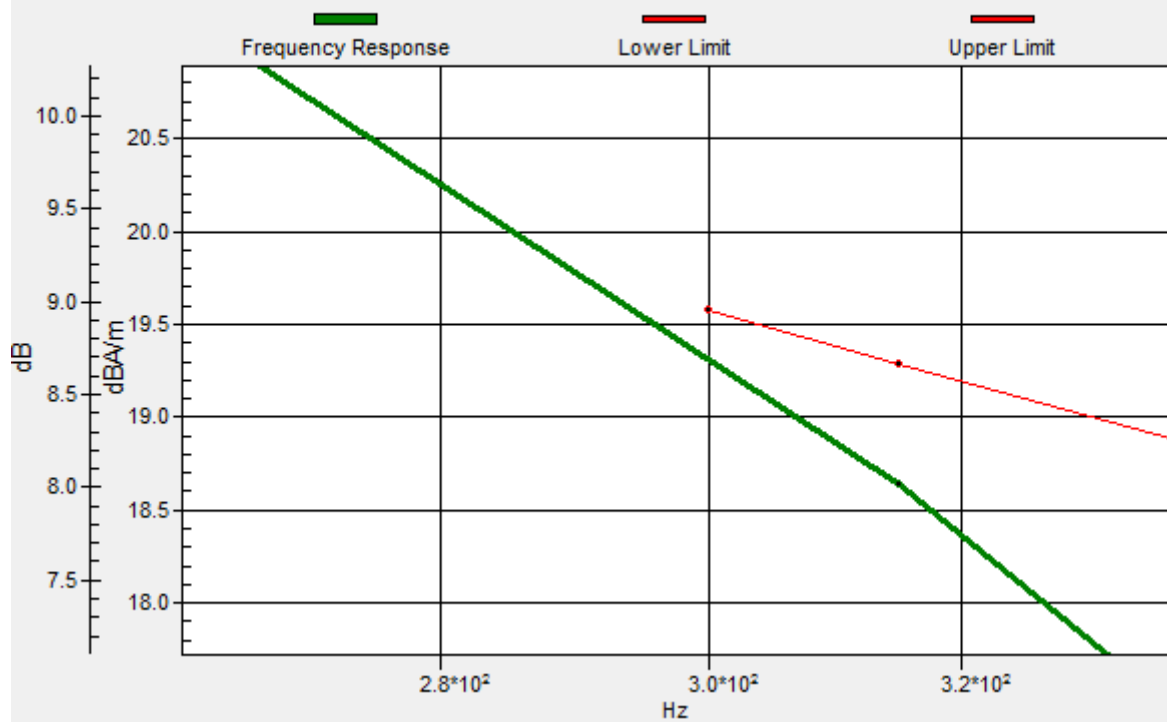
### Ch600/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 4.2, 4.2, 3.7 mm Diff: 0.2dB



### Ch600/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



### HAC\_T-Coil\_CDMA2000 BC1\_RC1 SO3\_Ch600\_Y

Communication System: UID 10276 - CAB, CDMA2000 (1xRTT, RC1, 1/8 Rate); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch600/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid:

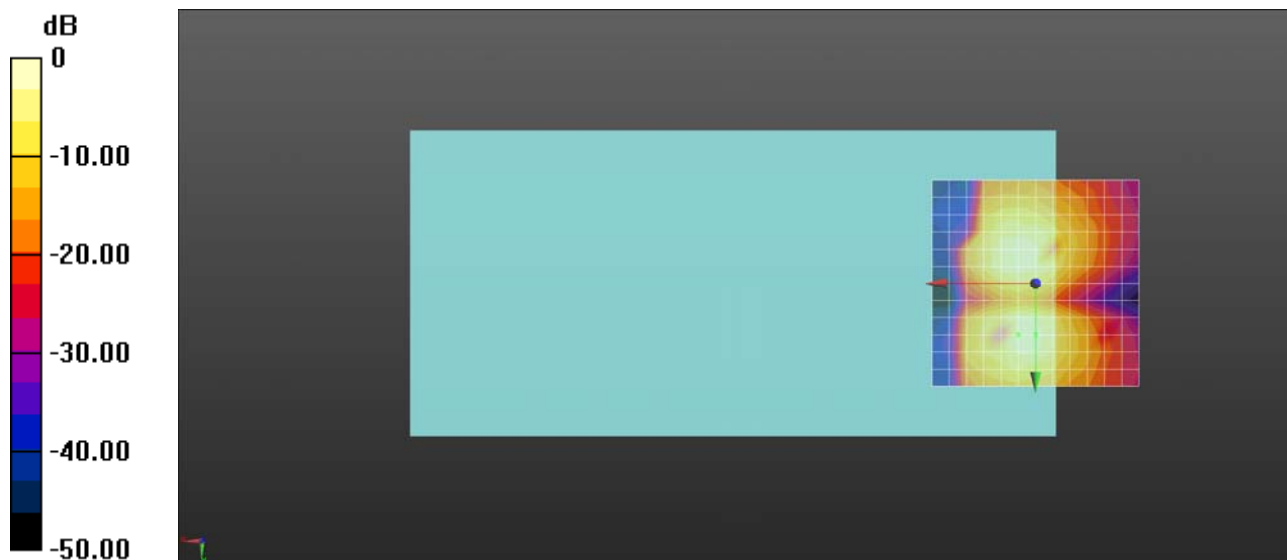
dx=10mm, dy=10mm

ABM1/ABM2 = 51.21 dB

ABM1 comp = 5.04 dBA/m

BWC Factor = 0.0089 dB

Location: 0, 12.5, 3.7 mm



0 dB = 363.7 = 51.21 dB

### HAC\_T-Coil\_LTE Band 2\_20M\_QPSK\_1RB\_0offset\_12.2Kbps\_Ch18900\_Z

Communication System: UID 10169 - CAB, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn871; Calibrated: 2019.06.27

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch18900/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

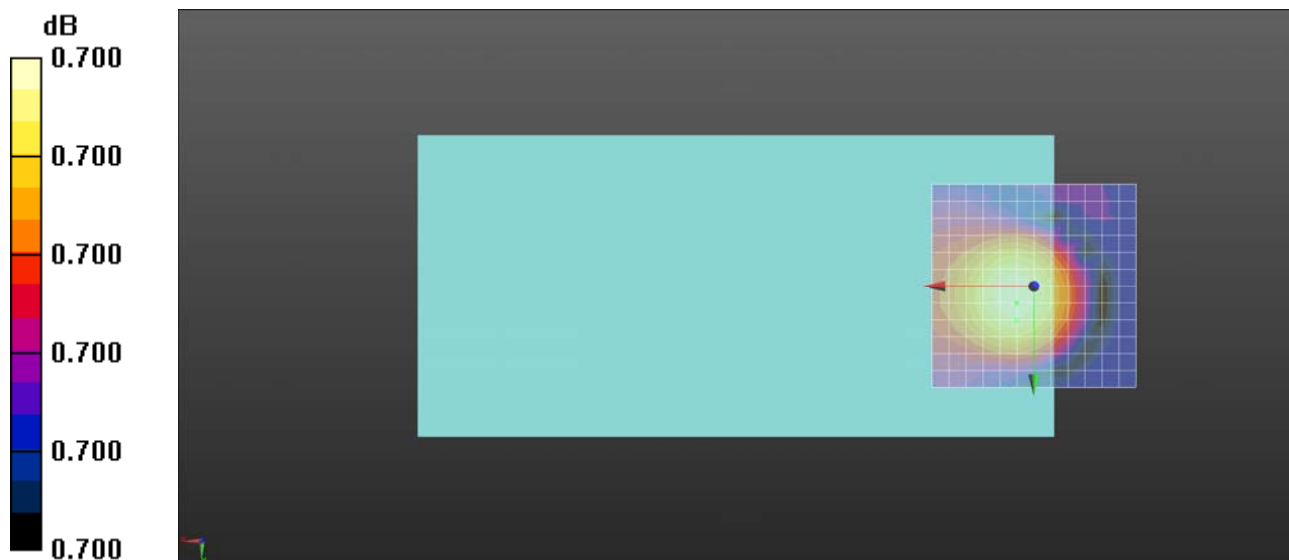
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 44.30 dB

ABM1 comp = -7.53 dBA/m

BWC Factor = 0.0044 dB

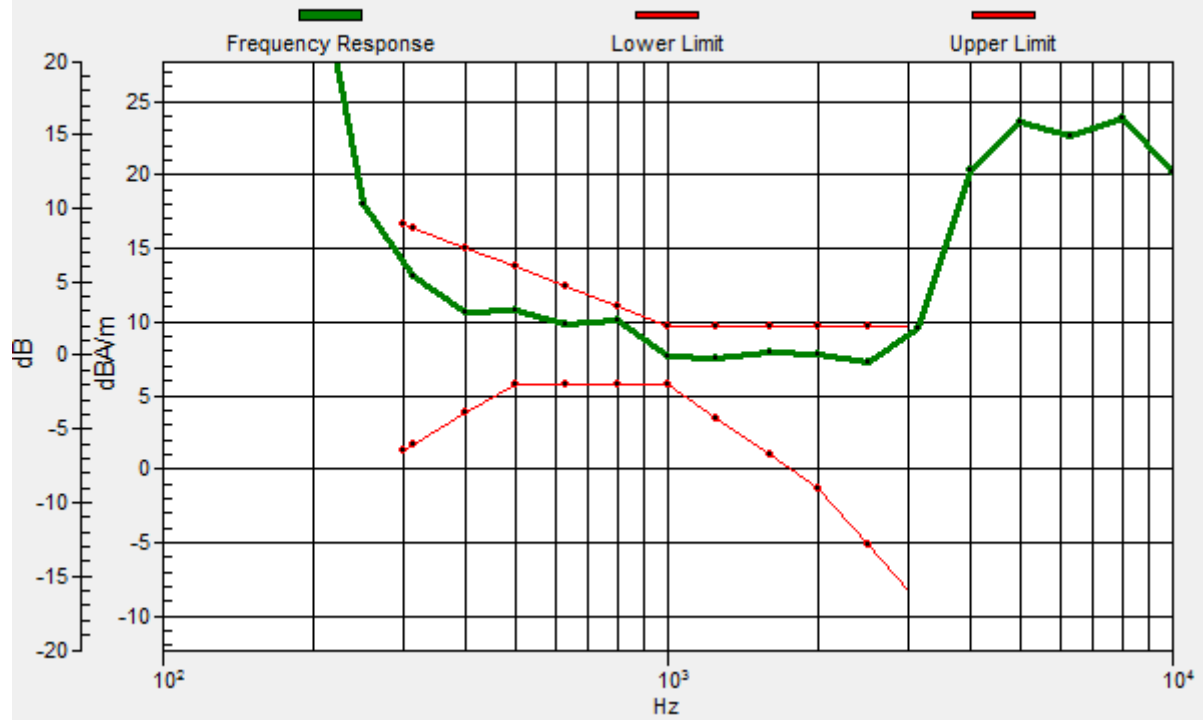
Location: 4.2, 8.3, 3.7 mm





# Ch18900/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 4.2, 8.3, 3.7 mm Diff: 0.7dB



### HAC\_T-Coil\_LTE Band 2\_20M\_QPSK\_1RB\_0offset\_12.2Kbps\_Ch18900\_Y

Communication System: UID 10169 - CAB, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);

Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn871; Calibrated: 2019.06.27

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch18900/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):** Measurement grid:

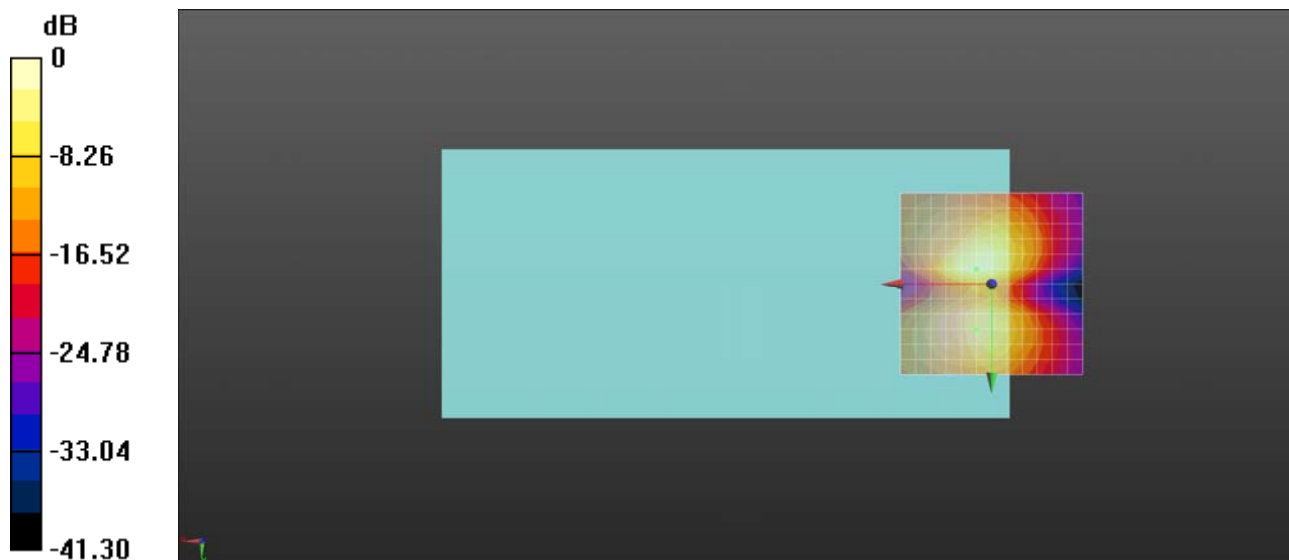
dx=10mm, dy=10mm

ABM1/ABM2 = 38.40 dB

ABM1 comp = -12.19 dBA/m

BWC Factor = 0.0044 dB

Location: 4.2, -4.2, 3.7 mm



0 dB = 83.20 = 38.40 dB

### HAC\_T-Coil\_LTE Band 4\_20M\_QPSK\_1RB\_0offset\_12.2Kbps\_Ch20175\_Z

Communication System: UID 10169 - CAB, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn871; Calibrated: 2019.06.27

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch20175/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

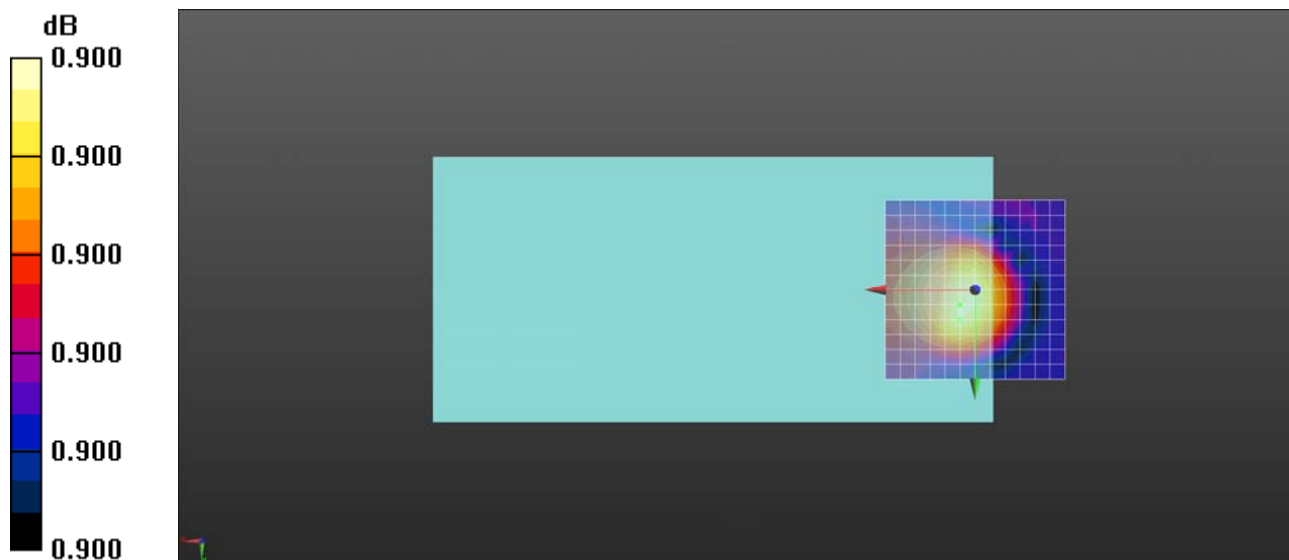
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 45.68 dB

ABM1 comp = -7.74 dBA/m

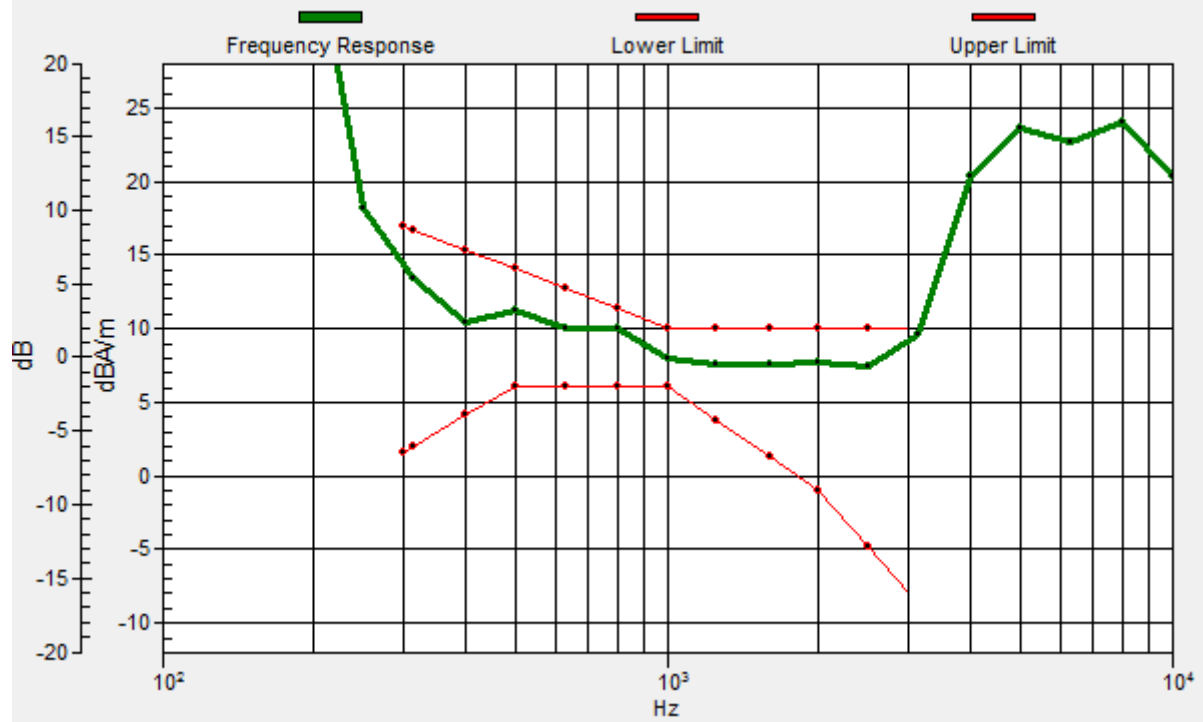
BWC Factor = 0.0013 dB

Location: 4.2, 8.3, 3.7 mm



# Ch20175/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 4.2, 8.3, 3.7 mm Diff: 0.9dB



### HAC\_T-Coil\_LTE Band 4\_20M\_QPSK\_1RB\_0offset\_12.2Kbps\_Ch20175\_Y

Communication System: UID 10169 - CAB, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);

Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn871; Calibrated: 2019.06.27

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch20175/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):** Measurement grid:

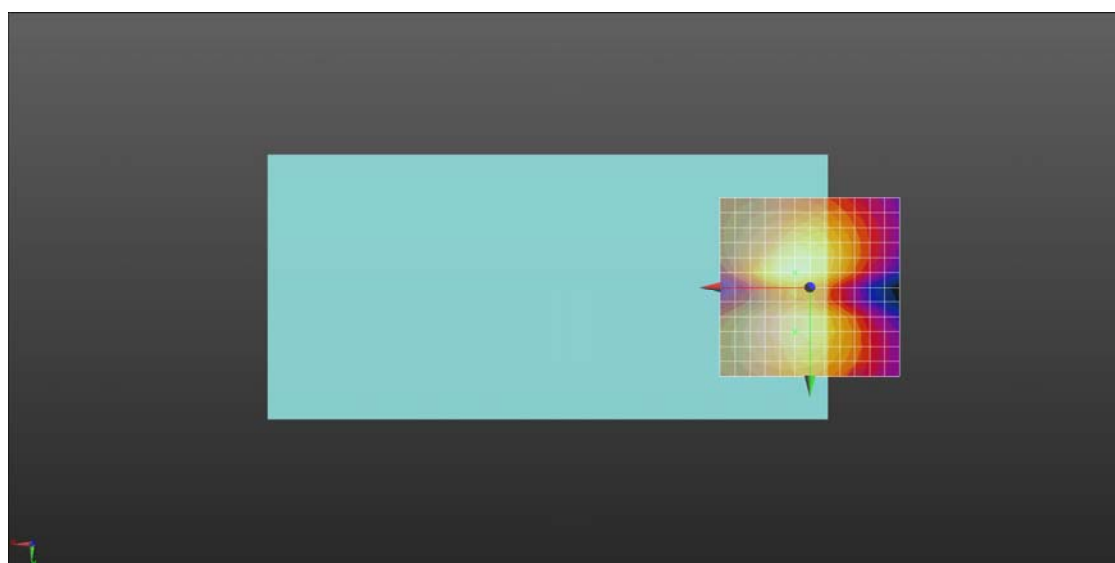
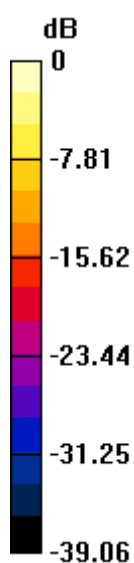
dx=10mm, dy=10mm

ABM1/ABM2 = 36.67 dB

ABM1 comp = -12.46 dBA/m

BWC Factor = 0.0013 dB

Location: 4.2, -4.2, 3.7 mm



0 dB = 68.16 = 36.67 dB

### HAC\_T-Coil\_LTE Band 5\_10M\_QPSK\_1RB\_0offset\_12.2Kbps\_Ch20525\_Z

Communication System: UID 10175 - CAB, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);  
Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch20525/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

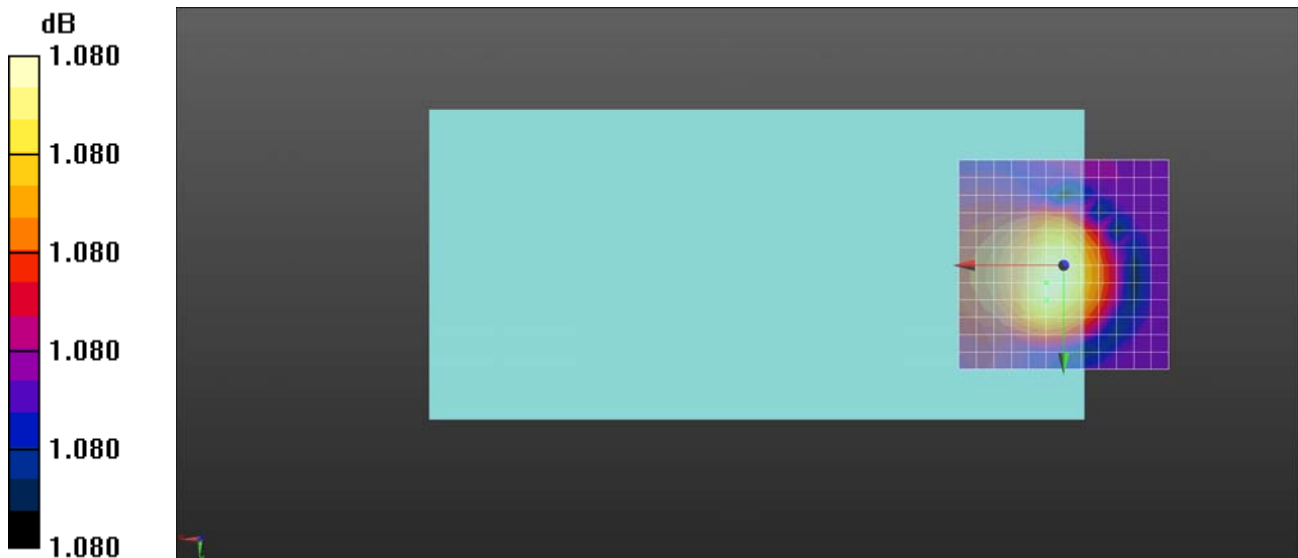
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 46.05 dB

ABM1 comp = -6.60 dBA/m

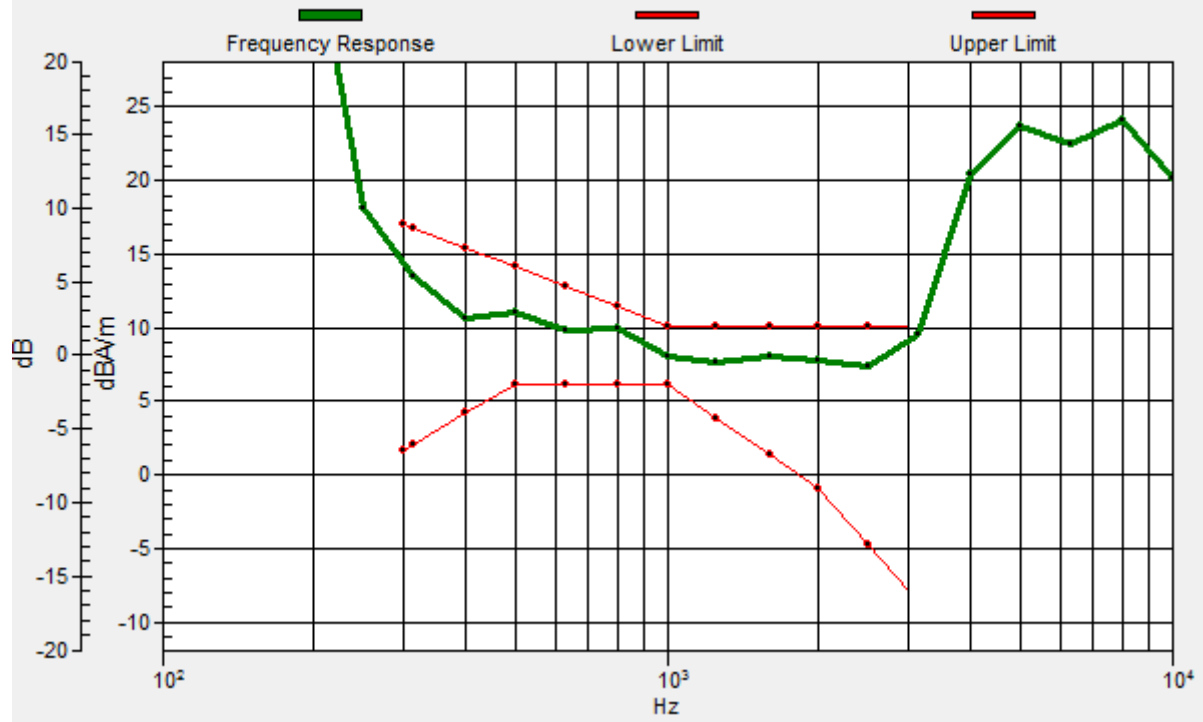
BWC Factor = 0.0038 dB

Location: 4.2, 8.3, 3.7 mm



# Ch20525/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 4.2, 8.3, 3.7 mm Diff: 1.08dB



### HAC\_T-Coil\_LTE Band 5\_10M\_QPSK\_1RB\_0offset\_12.2Kbps\_Ch20525\_Y

Communication System: UID 10175 - CAB, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);  
Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch20525/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid:

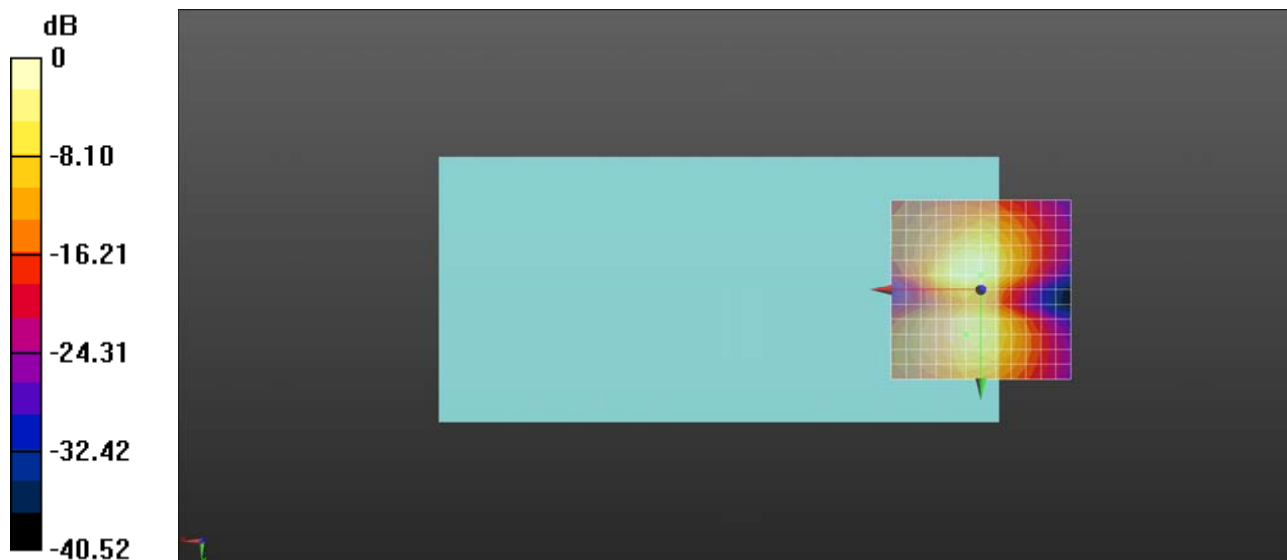
dx=10mm, dy=10mm

ABM1/ABM2 = 38.56 dB

ABM1 comp = -13.00 dBA/m

BWC Factor = 0.0038 dB

Location: 0, -4.2, 3.7 mm



0 dB = 84.73 = 38.56 dB



### HAC\_T-Coil\_LTE Band 7\_20M\_QPSK\_1RB\_99offset\_12.2Kbps\_Ch21100\_Z

Communication System: UID 10169 - CAB, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);

Frequency: 2535 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn871; Calibrated: 2019.06.27

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch21100/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

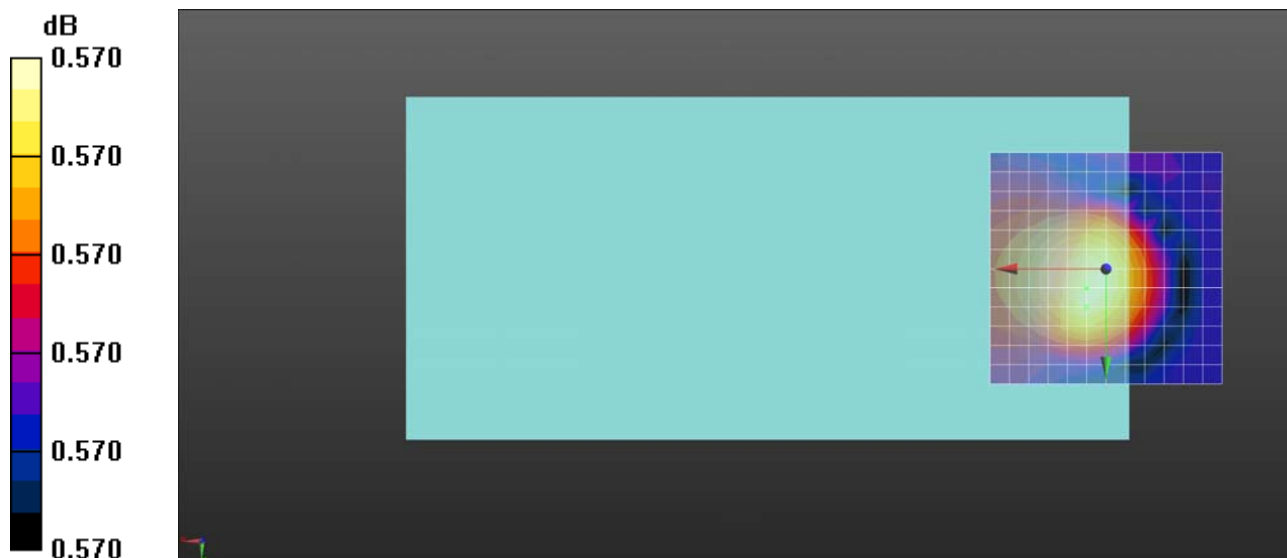
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 42.51 dB

ABM1 comp = -7.59 dBA/m

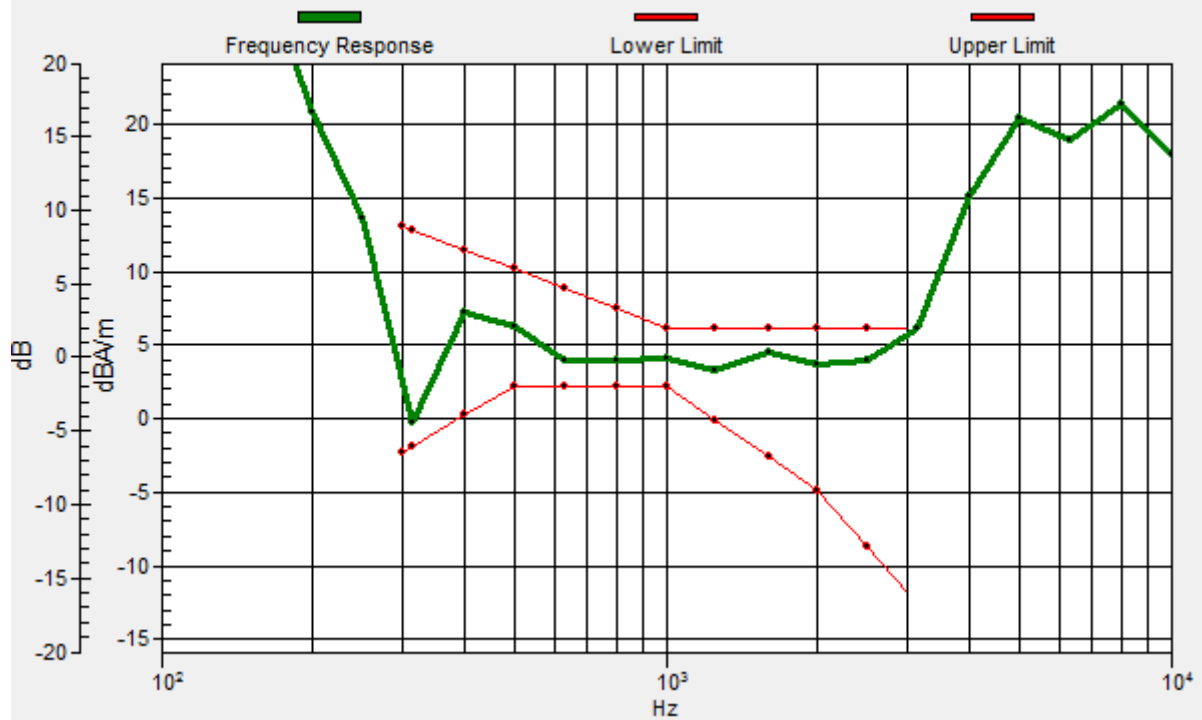
BWC Factor = -0.00063 dB

Location: 4.2, 8.3, 3.7 mm



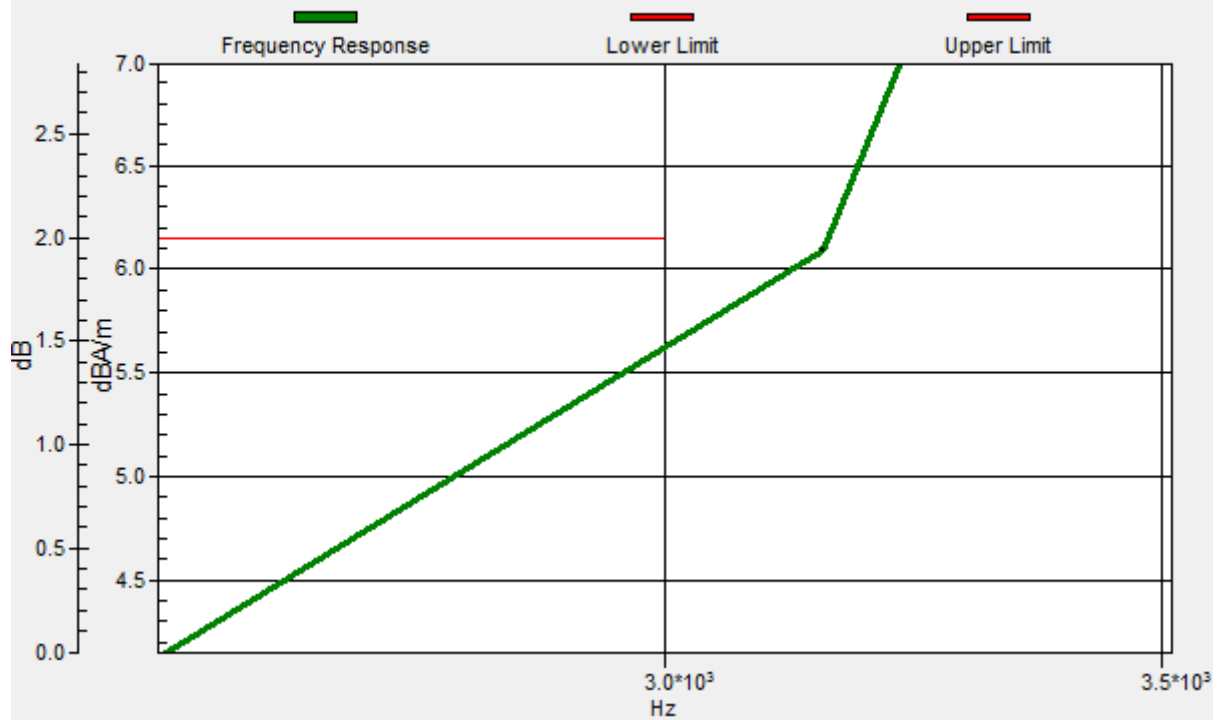
### Ch21100/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 4.2, 8.3, 3.7 mm Diff: 0.57dB



### Ch21100/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 4.2, 8.3, 3.7 mm Diff: 0.57dB



### HAC\_T-Coil\_LTE Band 7\_20M\_QPSK\_1RB\_99offset\_12.2Kbps\_Ch21100\_Y

Communication System: UID 10169 - CAB, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);  
Frequency: 2535 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch21100/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid:

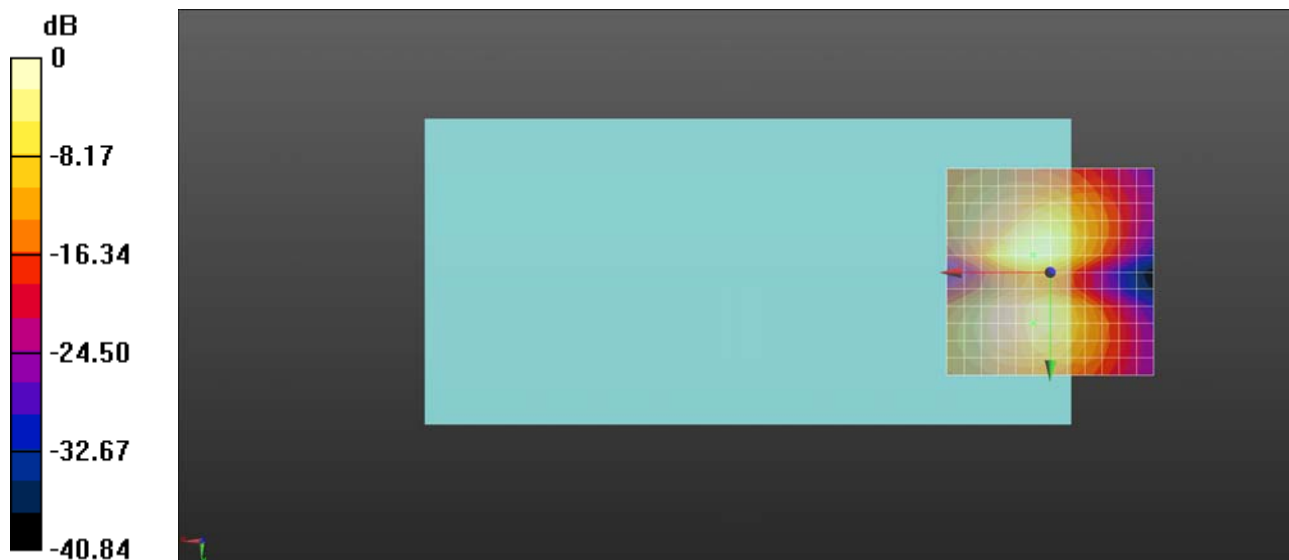
dx=10mm, dy=10mm

ABM1/ABM2 = 37.94 dB

ABM1 comp = -12.48 dBA/m

BWC Factor = -0.00063 dB

Location: 4.2, -4.2, 3.7 mm



0 dB = 78.90 = 37.94 dB

### HAC\_T-Coil\_LTE Band 12\_10M\_QPSK\_1RB\_49offset\_12.2Kbps\_Ch23095\_Z

Communication System: UID 10175 - CAB, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);

Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn871; Calibrated: 2019.06.27

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch23095/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

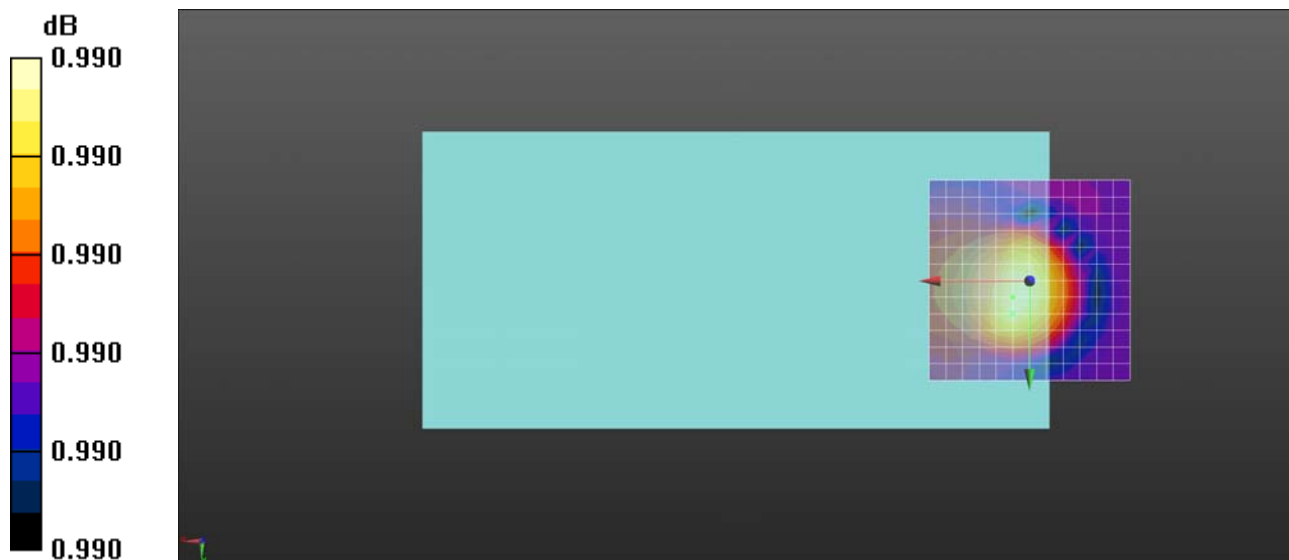
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 46.25 dB

ABM1 comp = -6.54 dBA/m

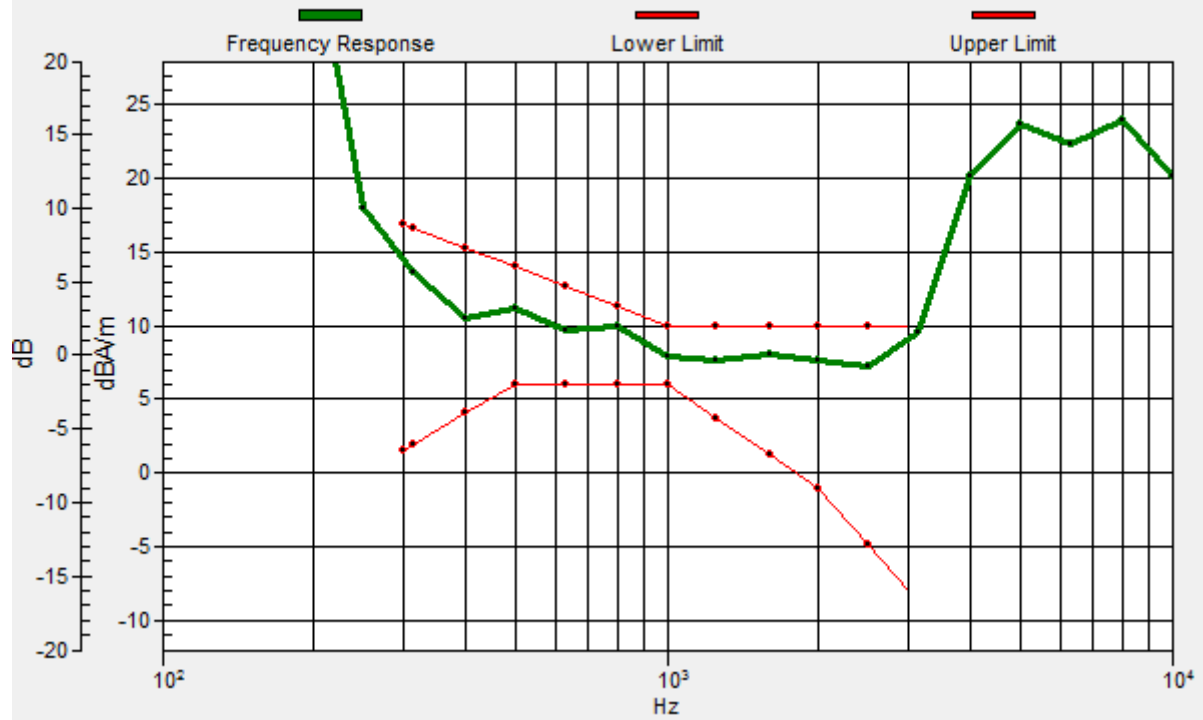
BWC Factor = -0.0022 dB

Location: 4.2, 8.3, 3.7 mm



# Ch23095/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 4.2, 8.3, 3.7 mm Diff: 0.99dB



### HAC\_T-Coil\_LTE Band 12\_10M\_QPSK\_1RB\_49offset\_12.2Kbps\_Ch23095\_Y

Communication System: UID 10175 - CAB, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);

Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn871; Calibrated: 2019.06.27

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch23095/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):** Measurement grid:

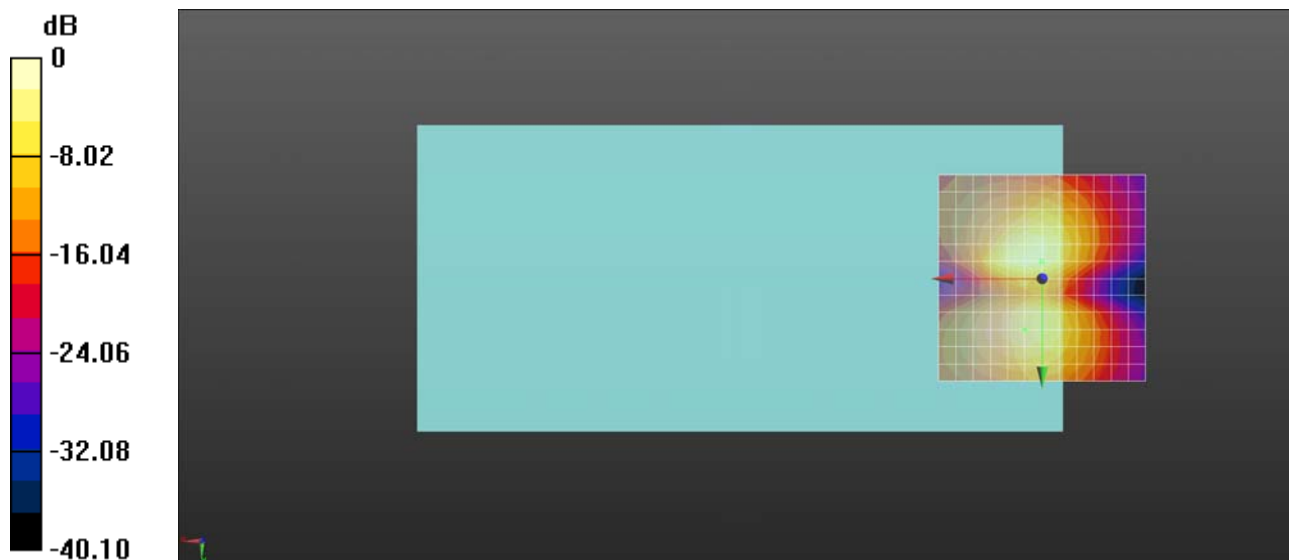
dx=10mm, dy=10mm

ABM1/ABM2 = 38.05 dB

ABM1 comp = -13.16 dBA/m

BWC Factor = -0.0022 dB

Location: 0, -4.2, 3.7 mm



0 dB = 79.87 = 38.05 dB

### HAC\_T-Coil\_LTE Band 17\_10M\_QPSK\_1RB\_49offset\_12.2Kbps\_Ch23790\_Z

Communication System: UID 10175 - CAB, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);

Frequency: 710 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn871; Calibrated: 2019.06.27

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch23790/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

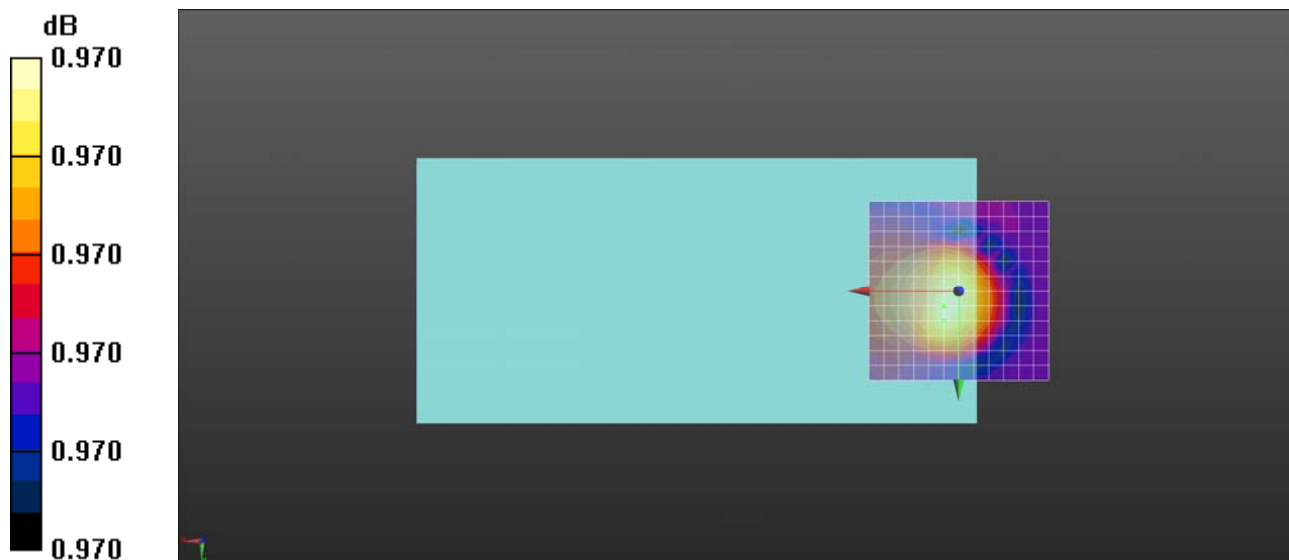
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 45.66 dB

ABM1 comp = -6.51 dBA/m

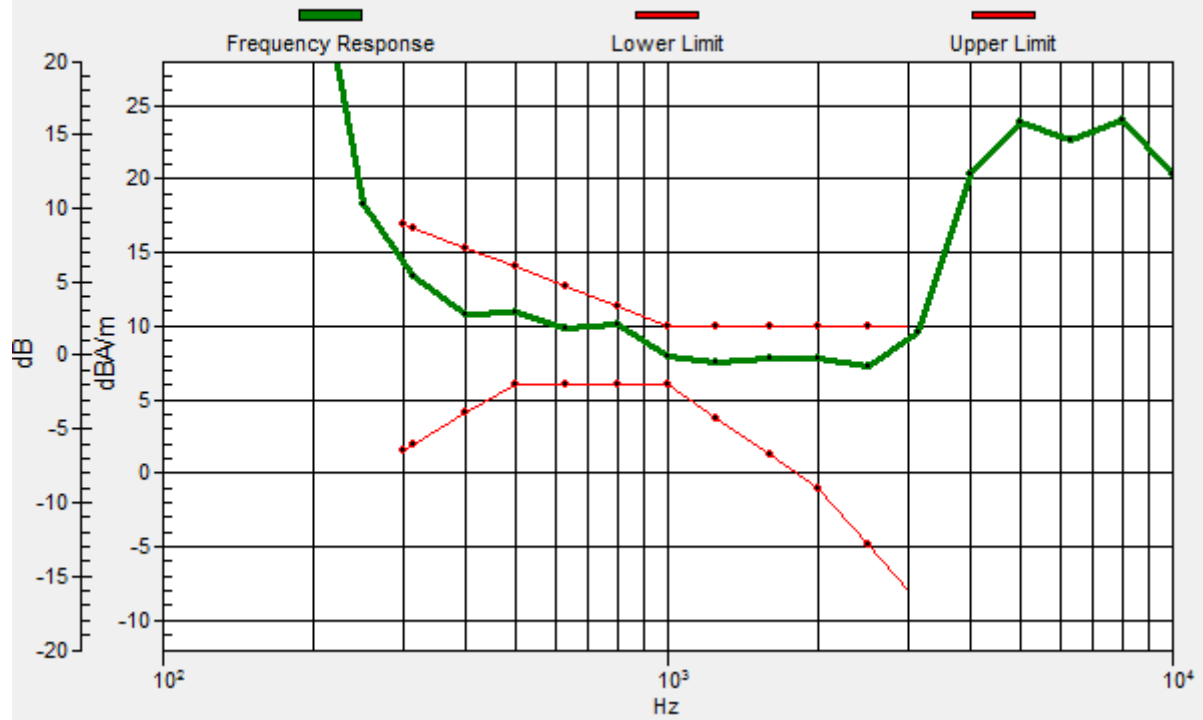
BWC Factor = -0.0003 dB

Location: 4.2, 8.3, 3.7 mm



# Ch23790/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 4.2, 8.3, 3.7 mm Diff: 0.97dB





### HAC\_T-Coil\_LTE Band 17\_10M\_QPSK\_1RB\_49offset\_12.2Kbps\_Ch23790\_Y

Communication System: UID 10175 - CAB, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);  
Frequency: 710 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch23790/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid:

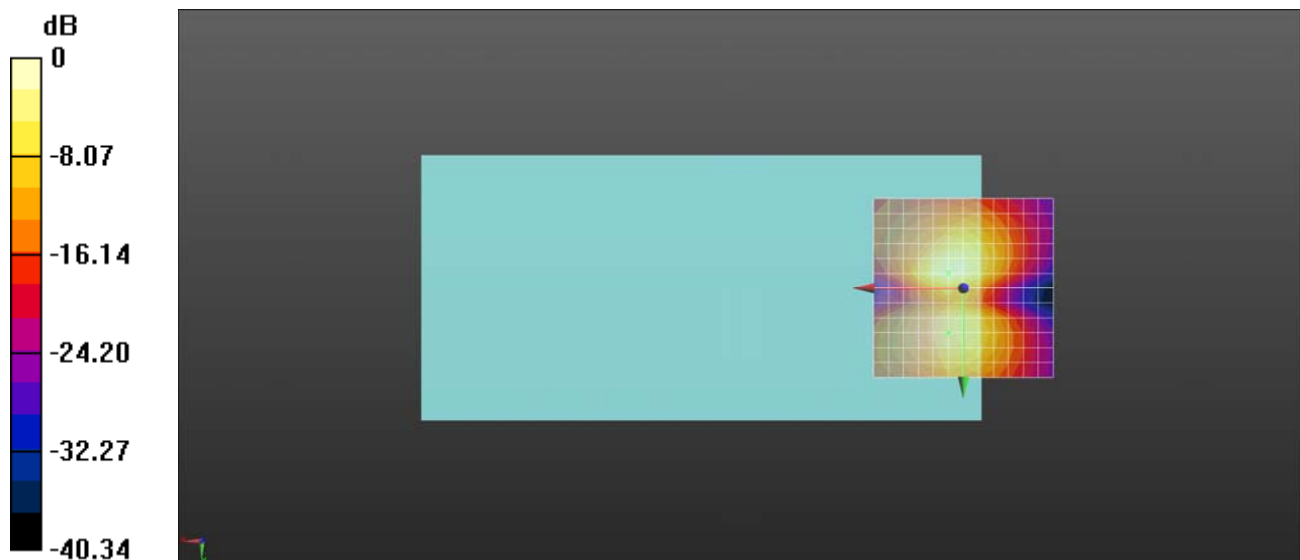
dx=10mm, dy=10mm

ABM1/ABM2 = 37.77 dB

ABM1 comp = -11.76 dBA/m

BWC Factor = -0.0003 dB

Location: 4.2, -4.2, 3.7 mm



0 dB = 77.37 = 37.77 dB

### HAC\_T-Coil\_LTE Band 18\_15M\_QPSK\_1RB\_37offset\_12.2Kbps\_Ch23925\_Z

Communication System: UID 10181 - CAB, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK);  
Frequency: 822.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch23925/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid:

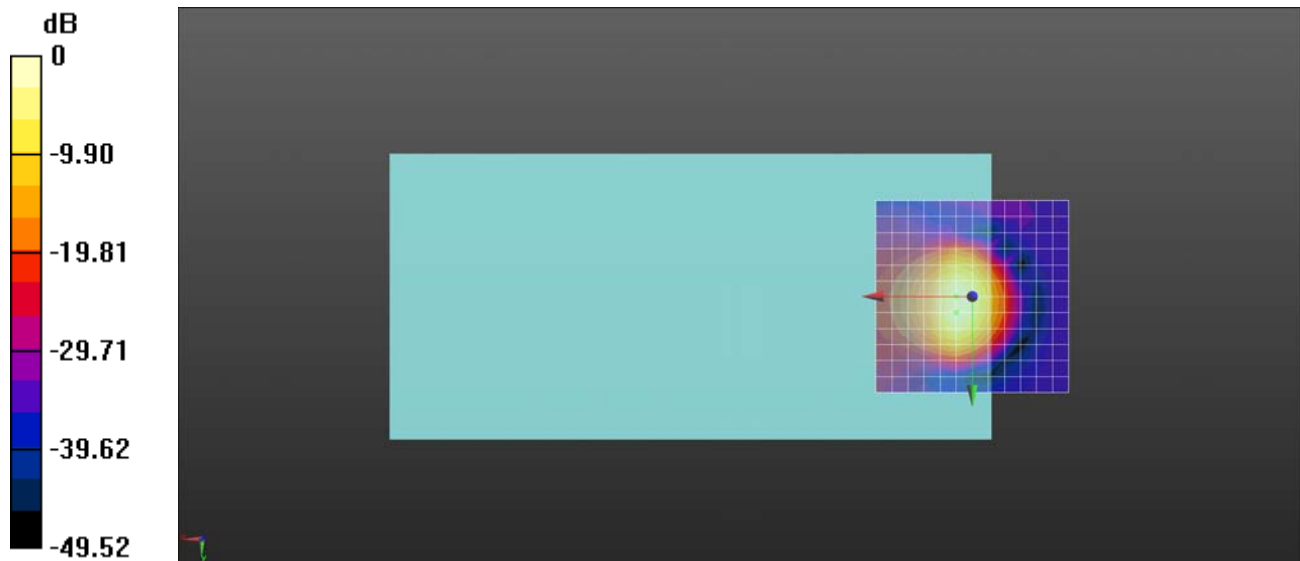
dx=10mm, dy=10mm

ABM1/ABM2 = 41.66 dB

ABM1 comp = -4.39 dBA/m

BWC Factor = -0.0018 dB

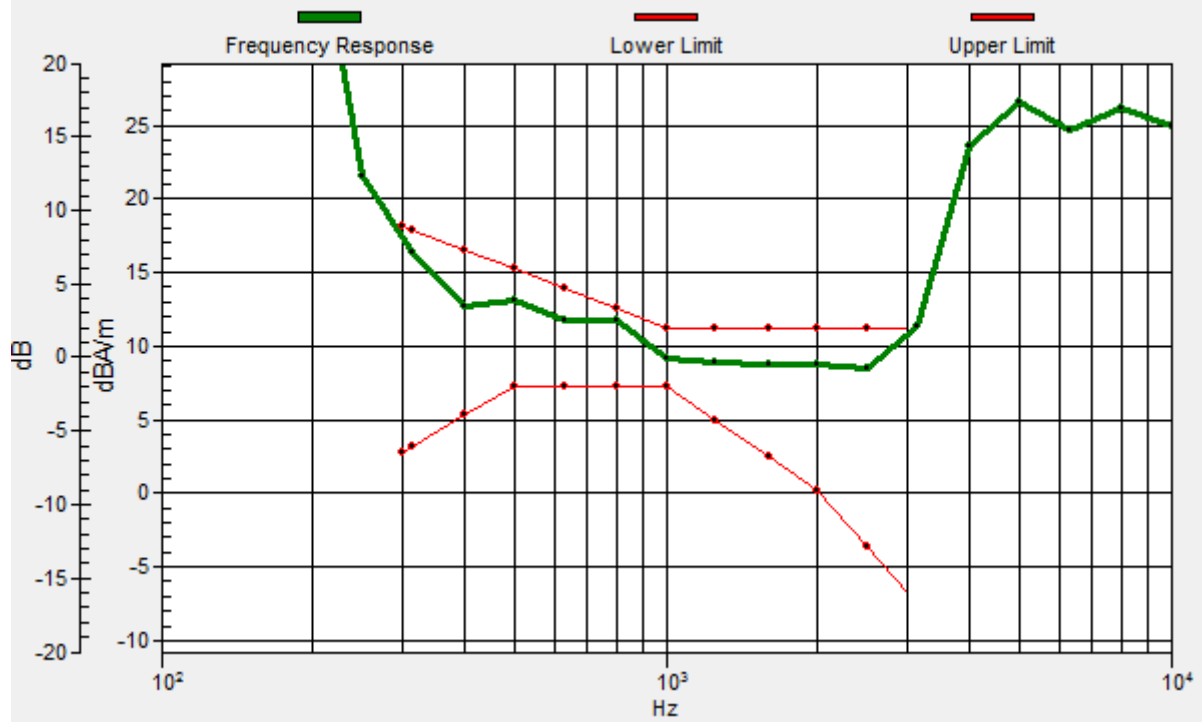
Location: 4.2, 4.2, 3.7 mm



0 dB = 121.1 = 41.66 dB

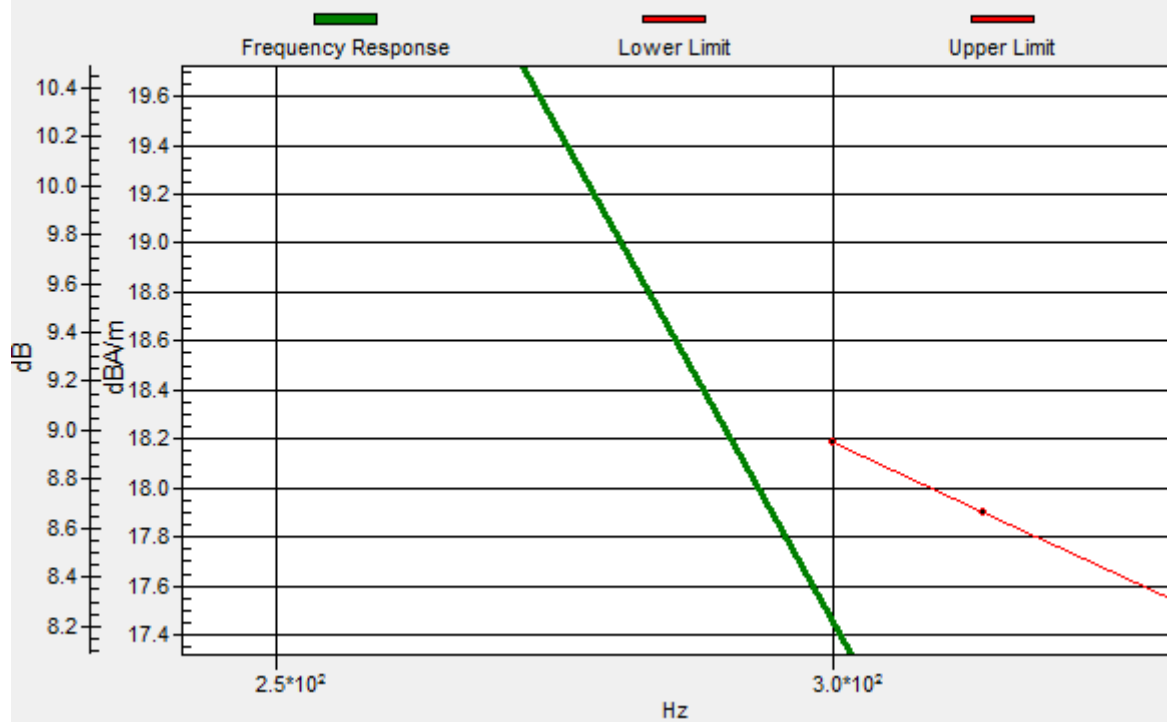
### Ch23925/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 4.2, 4.2, 3.7 mm Diff: 0.53dB



### Ch23925/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 4.2, 4.2, 3.7 mm Diff: 0.53dB



### HAC\_T-Coil\_LTE Band 18\_15M\_QPSK\_1RB\_37offset\_12.2Kbps\_Ch23925\_Y

Communication System: UID 10181 - CAB, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK);

Frequency: 822.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.1 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn871; Calibrated: 2019.06.27

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Ch23925/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):** Measurement grid:

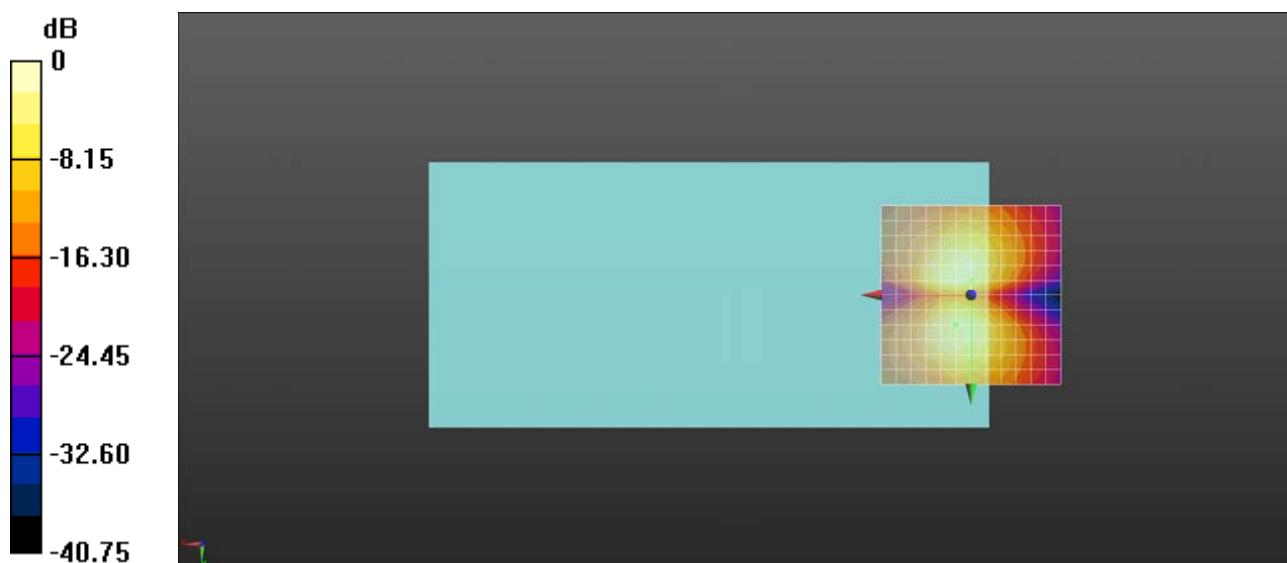
dx=10mm, dy=10mm

ABM1/ABM2 = 32.99 dB

ABM1 comp = -14.80 dBA/m

BWC Factor = -0.0018 dB

Location: 0, -4.2, 3.7 mm



0 dB = 44.60 = 32.99 dB

### HAC\_T-Coil\_LTE Band 19\_15M\_QPSK\_1RB\_37offset\_12.2Kbps\_Ch24075\_Z

Communication System: UID 10181 - CAB, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK);

Frequency: 837.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn871; Calibrated: 2019.06.27

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;

- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch24075/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

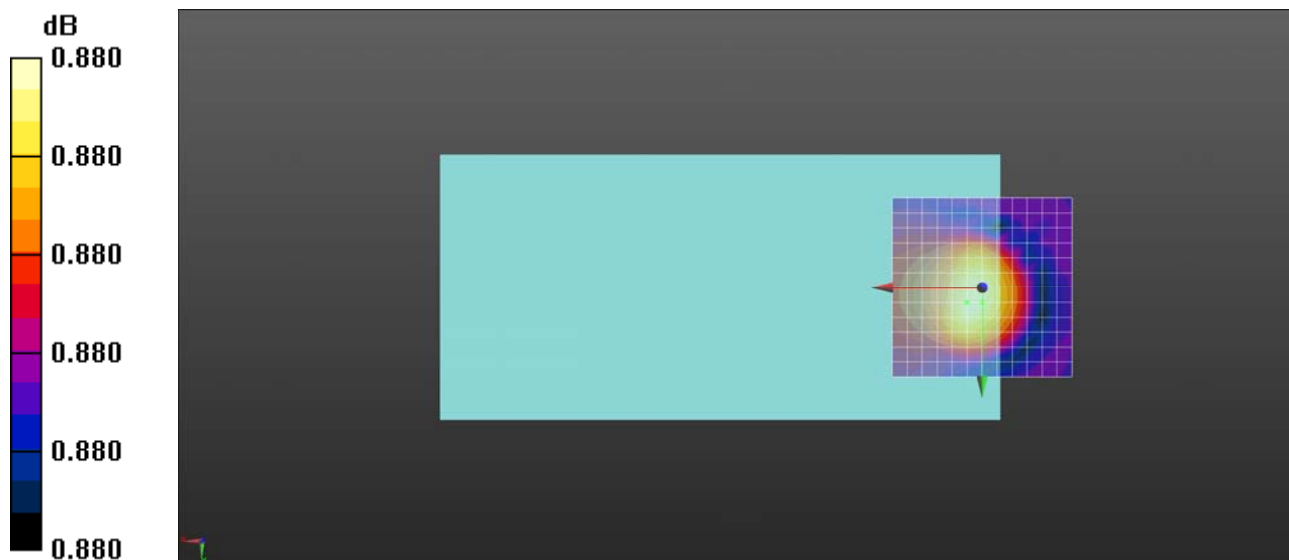
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 45.77 dB

ABM1 comp = -6.83 dBA/m

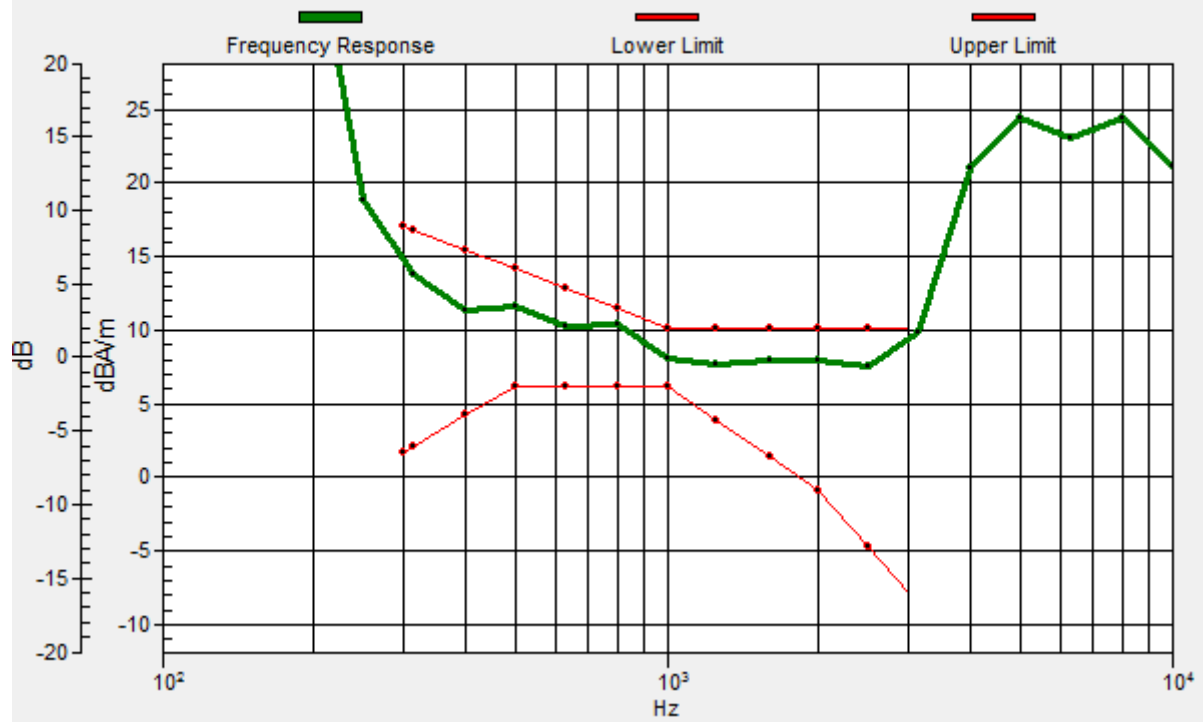
BWC Factor = -0.0055 dB

Location: 0, 4.2, 3.7 mm



# Ch24075/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, 4.2, 3.7 mm Diff: 0.88dB



### HAC\_T-Coil\_LTE Band 19\_15M\_QPSK\_1RB\_37offset\_12.2Kbps\_Ch24075\_Y

Communication System: UID 10181 - CAB, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK);  
Frequency: 837.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C; Liquid Temperature : 22.1 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch24075/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid:

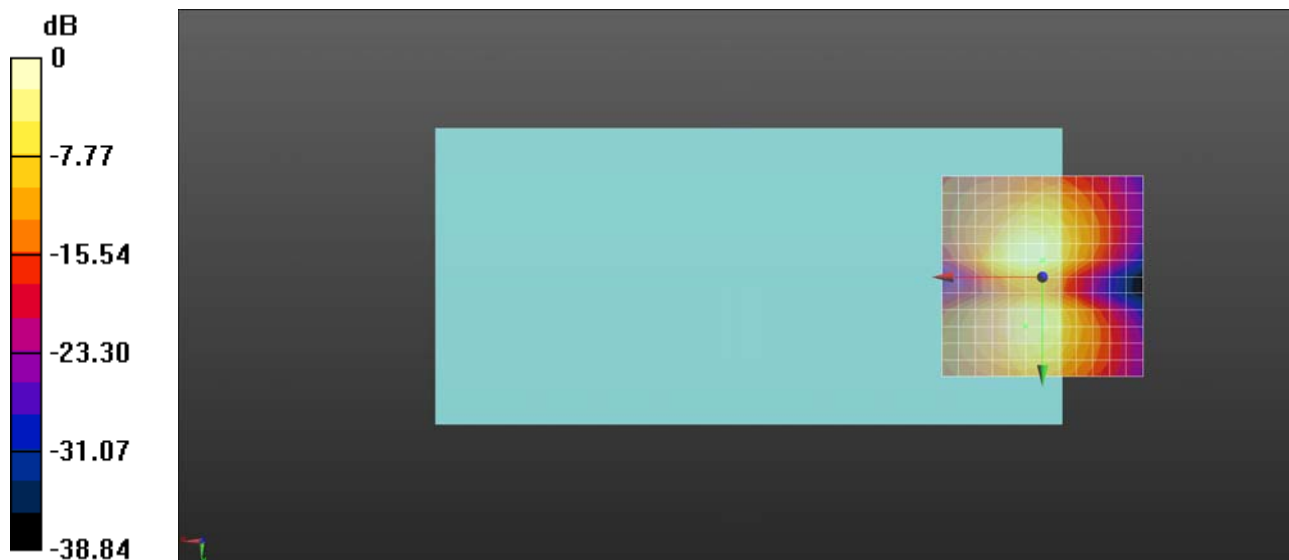
dx=10mm, dy=10mm

ABM1/ABM2 = 36.72 dB

ABM1 comp = -14.71 dBA/m

BWC Factor = -0.0039 dB

Location: 0, -4.2, 3.7 mm



0 dB = 68.57 = 36.72 dB

### HAC\_T-Coil\_LTE Band 26\_15M\_QPSK\_1RB\_0offset\_12.2Kbps\_Ch26865\_Z

Communication System: UID 10181 - CAB, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK);  
Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch26865/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement

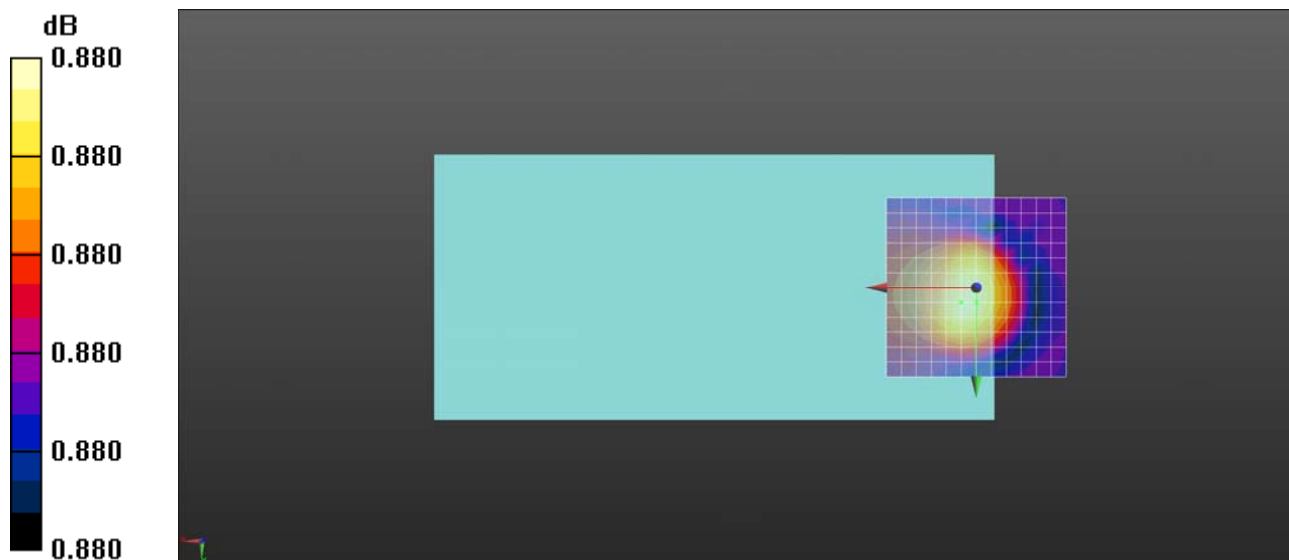
grid: dx=10mm, dy=10mm

ABM1/ABM2 = 45.77 dB

ABM1 comp = -6.83 dBA/m

BWC Factor = -0.0055 dB

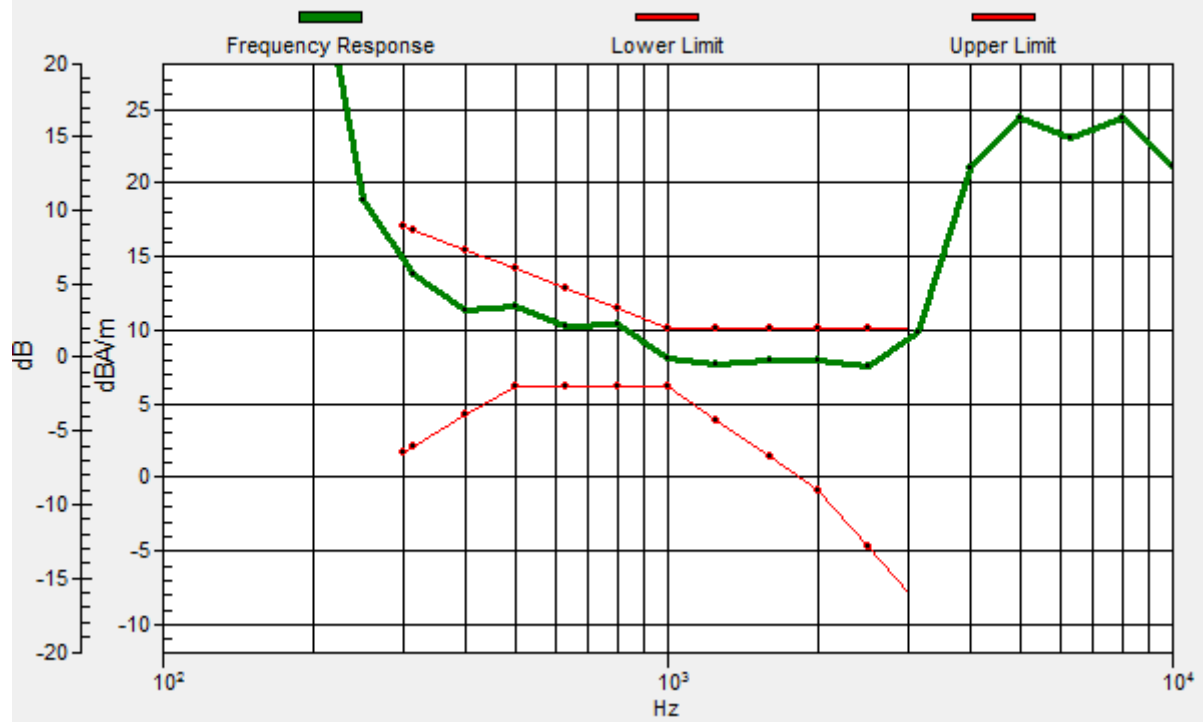
Location: 0, 4.2, 3.7 mm





# Ch26865/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)

Loc: 0, 4.2, 3.7 mm Diff: 0.88dB



### HAC\_T-Coil\_LTE Band 26\_15M\_QPSK\_1RB\_0offset\_12.2Kbps\_Ch26865\_Y

Communication System: UID 10181 - CAB, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK);  
Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: Air Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Ambient Temperature : 23.2 °C

#### DASY5 Configuration:

- Probe: AM1DV2 - 1048; ; Calibrated: 2019.12.10
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn871; Calibrated: 2019.06.27
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

#### Ch26865/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid:

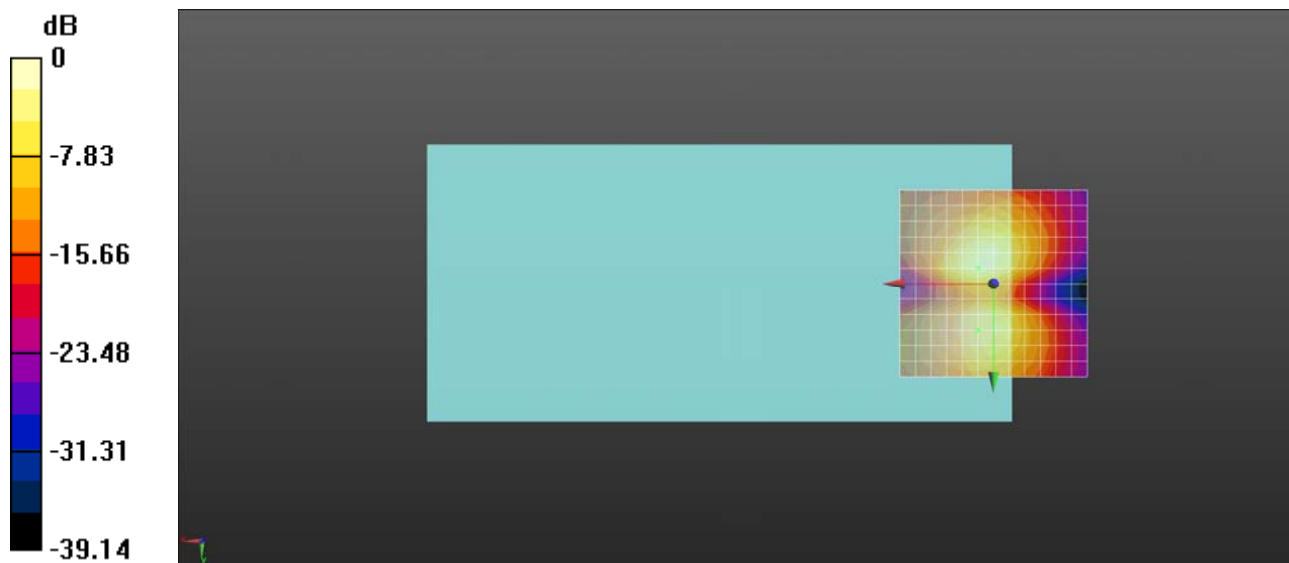
dx=10mm, dy=10mm

ABM1/ABM2 = 37.08 dB

ABM1 comp = -13.18 dBA/m

BWC Factor = -0.0055 dB

Location: 4.2, -4.2, 3.7 mm



0 dB = 71.44 = 37.08 dB