

P17 T-Coil_LTE 38_QPSK20M_Ch38000_1RB_OS0_EVS NB 5.9kbps_Freq Resp

Communication System: LTE; Frequency: 2595 MHz; Duty Cycle: 1:1.59

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

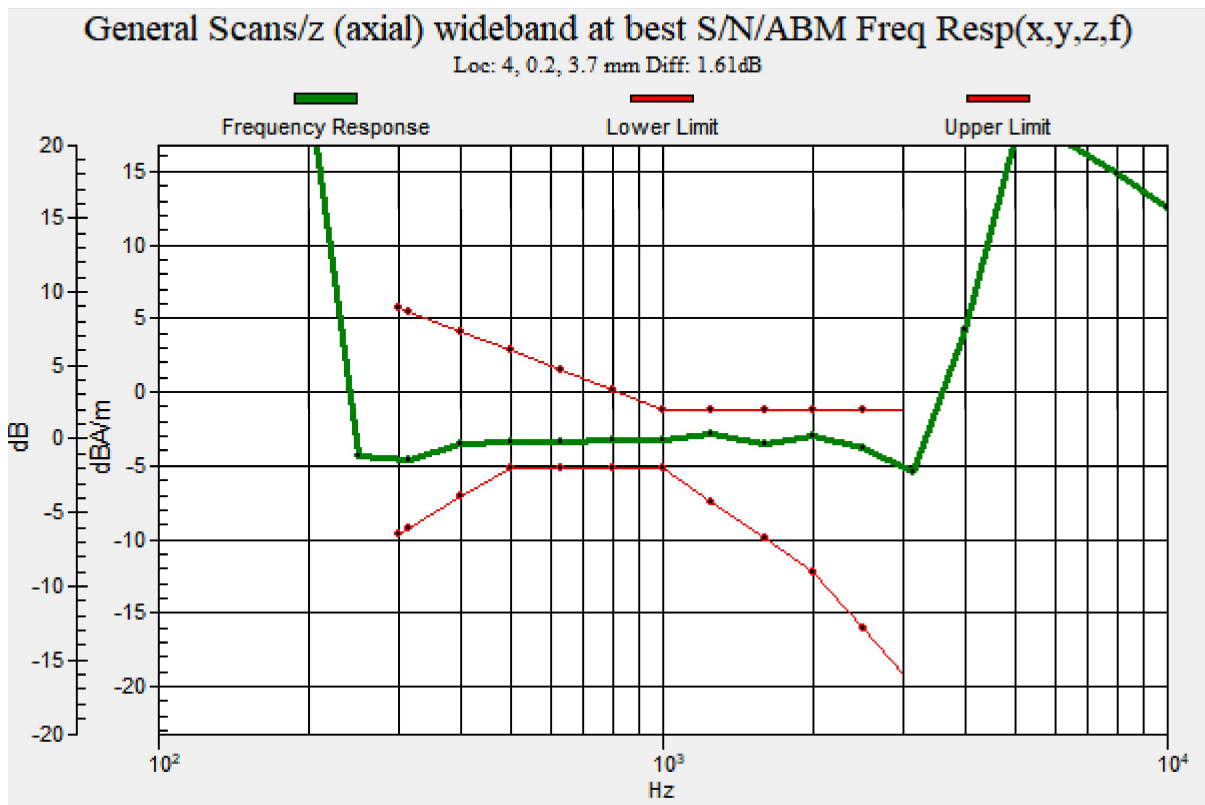
Ambient Temperature : 23.2°C

DASY5 Configuration:

- Probe: AM1DV3 - 3144; ; Calibrated: 9/21/2020
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1633; Calibrated: 9/28/2020
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

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

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



P18 T-Coil_LTE 41_QPSK20M_Ch40620_1RB_OS0_EVS NB 5.9kbps_Axial (Z)

Communication System: LTE; Frequency: 2593 MHz; Duty Cycle: 1:1.59

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

Ambient Temperature : 23.2°C

DASY5 Configuration:

- Probe: AM1DV3 - 3144; ; Calibrated: 9/21/2020
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1633; Calibrated: 9/28/2020
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

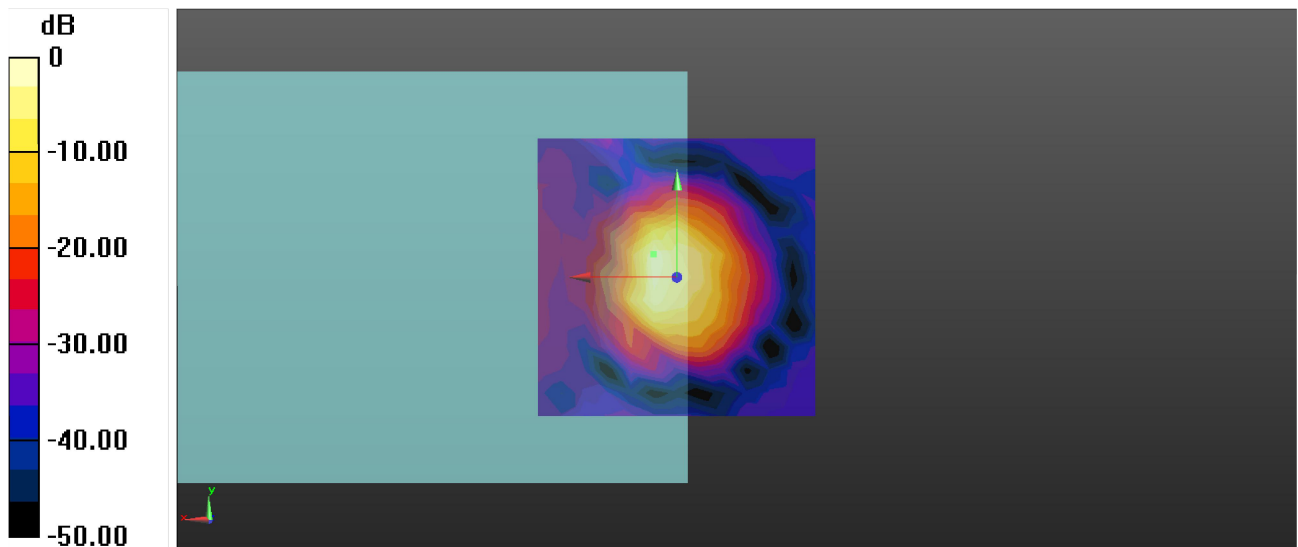
General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid:

dx=10mm, dy=10mm

ABM1/ABM2 = 31.46 dB

ABM1 comp = 0.46 dBA/m

Location: 4.2, 4.2, 3.7 mm



0 dB = 37.39 = 31.46 dB

P18 T-Coil_LTE 41_QPSK20M_Ch40620_1RB_OS0_EVS NB 5.9kbps_Radial (Y)

Communication System: LTE; Frequency: 2593 MHz; Duty Cycle: 1:1.59

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

Ambient Temperature : 23.2°C

DASY5 Configuration:

- Probe: AM1DV3 - 3144; ; Calibrated: 9/21/2020
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1633; Calibrated: 9/28/2020
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

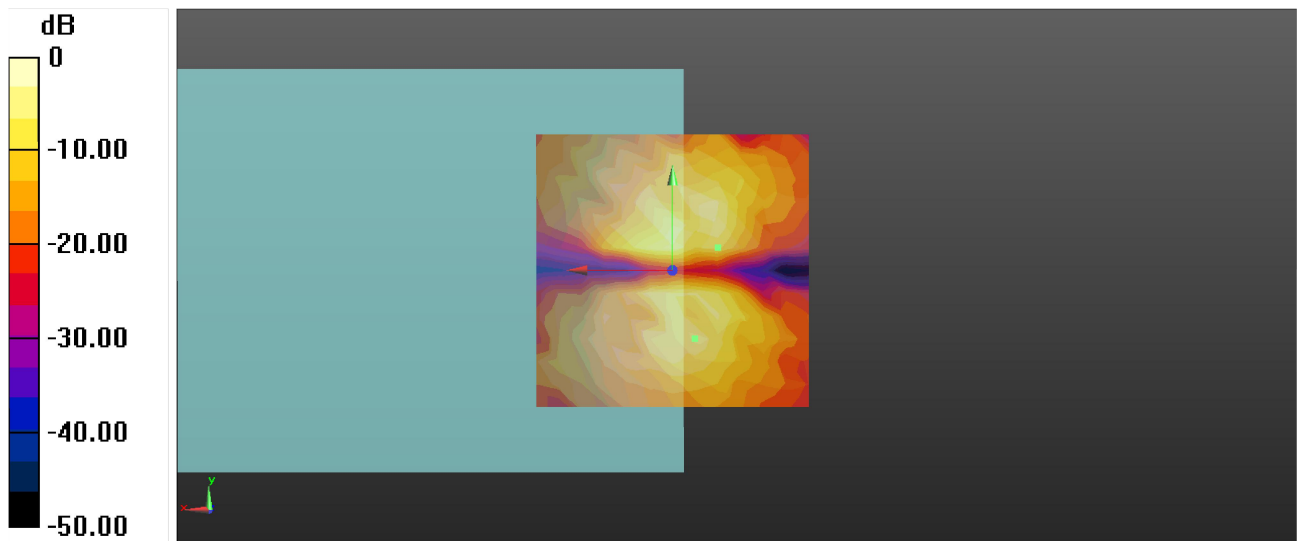
General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

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

ABM1/ABM2 = 26.87 dB

ABM1 comp = -15.50 dBA/m

Location: -8.3, 4.2, 3.7 mm



0 dB = 22.04 = 26.87 dB

P18 T-Coil_LTE 41_QPSK20M_Ch40620_1RB_OS0_EVS NB 5.9kbps_Freq Resp

Communication System: LTE TDD; Frequency: 2593 MHz; Duty Cycle: 1:1.59

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

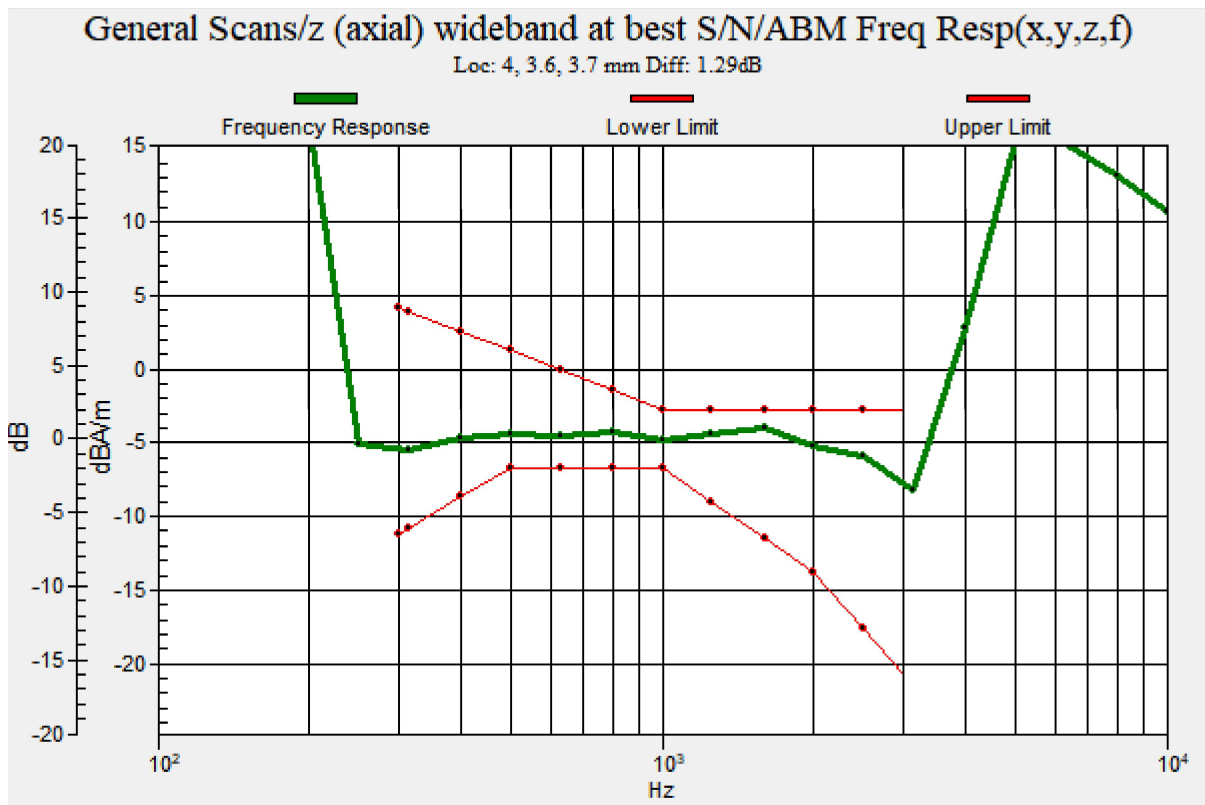
Ambient Temperature : 23.2°C

DASY5 Configuration:

- Probe: AM1DV3 - 3144; ; Calibrated: 9/21/2020
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1633; Calibrated: 9/28/2020
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

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

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



P19 T-Coil_LTE 66_QPSK20M_Ch132322_1RB_OS0_EVS NB 5.9kbps_Axial (Z)

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

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

Ambient Temperature : 23.2°C

DASY5 Configuration:

- Probe: AM1DV3 - 3144; ; Calibrated: 9/21/2020
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1633; Calibrated: 9/28/2020
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

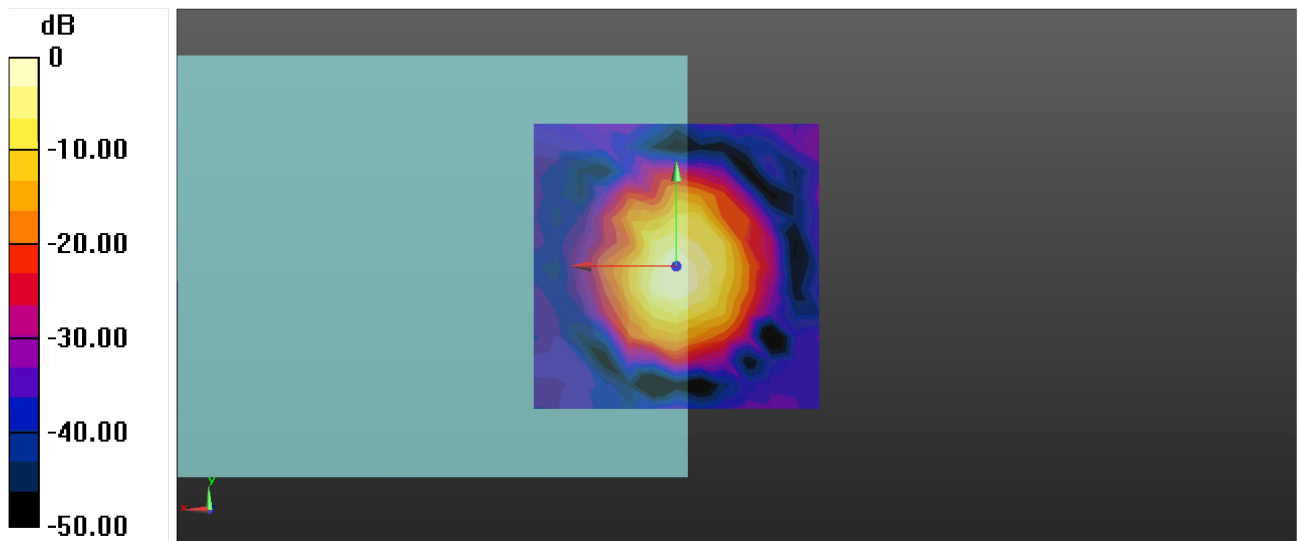
General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid:

dx=10mm, dy=10mm

ABM1/ABM2 = 49.96 dB

ABM1 comp = 3.66 dBA/m

Location: 0, 0, 3.7 mm



0 dB = 314.7 = 49.96 dB

P19 T-Coil_LTE 66_QPSK20M_Ch132322_1RB_OS0_EVS NB 5.9kbps_Radial (Y)

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

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

Ambient Temperature : 23.2°C

DASY5 Configuration:

- Probe: AM1DV3 - 3144; ; Calibrated: 9/21/2020
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1633; Calibrated: 9/28/2020
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

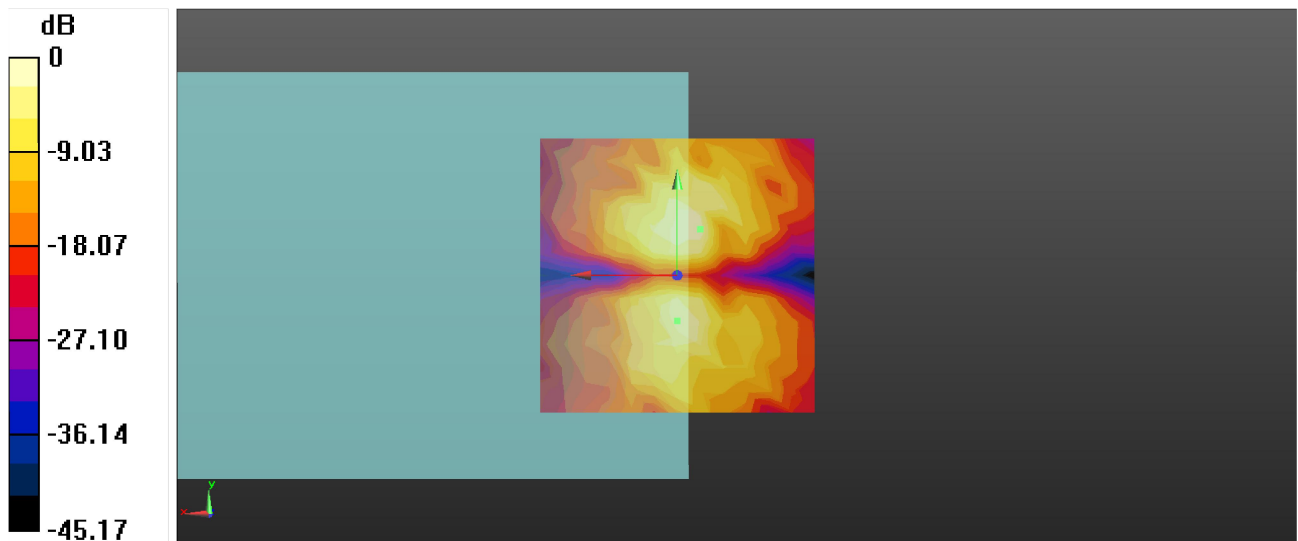
General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

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

ABM1/ABM2 = 44.36 dB

ABM1 comp = -6.79 dBA/m

Location: -4.2, 8.3, 3.7 mm



0 dB = 165.1 = 44.36 dB

P19 T-Coil_LTE 66_QPSK20M_Ch132322_1RB_OS0_EVS NB 5.9kbps_Freq Resp

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

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

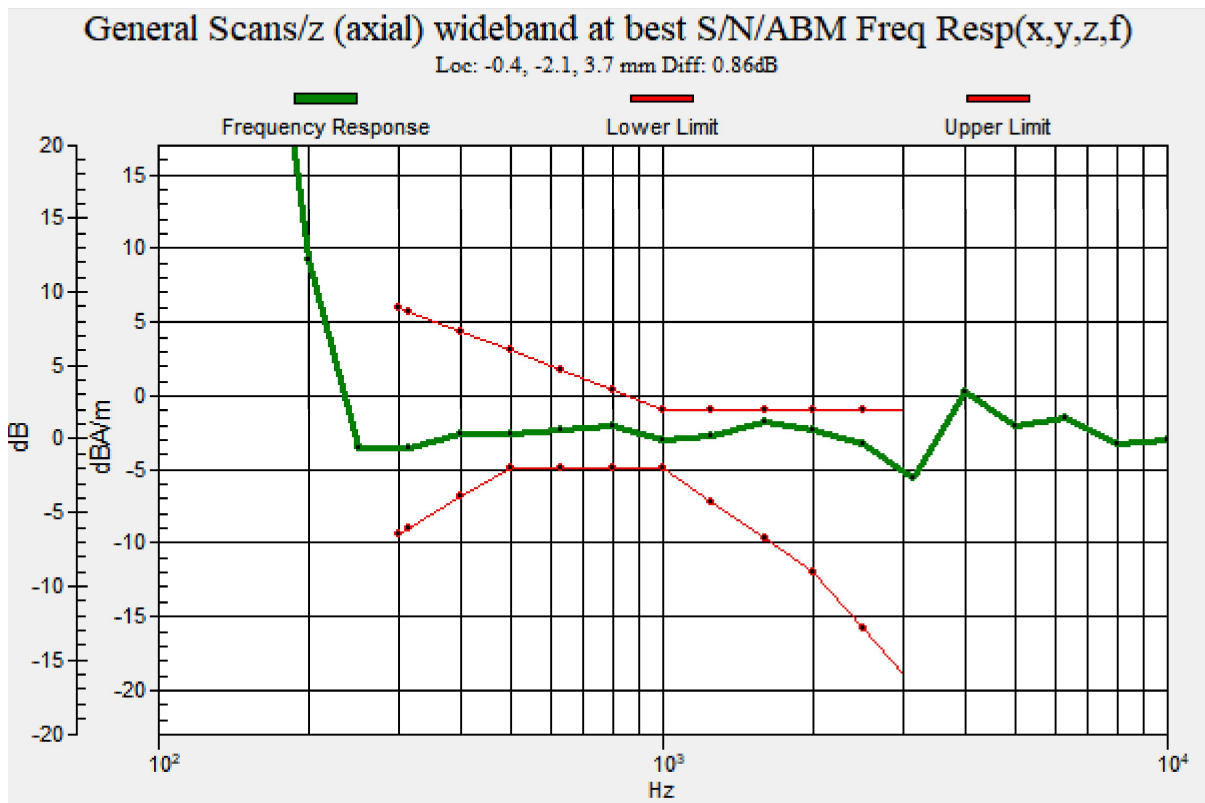
Ambient Temperature : 23.2°C

DASY5 Configuration:

- Probe: AM1DV3 - 3144; ; Calibrated: 9/21/2020
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1633; Calibrated: 9/28/2020
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

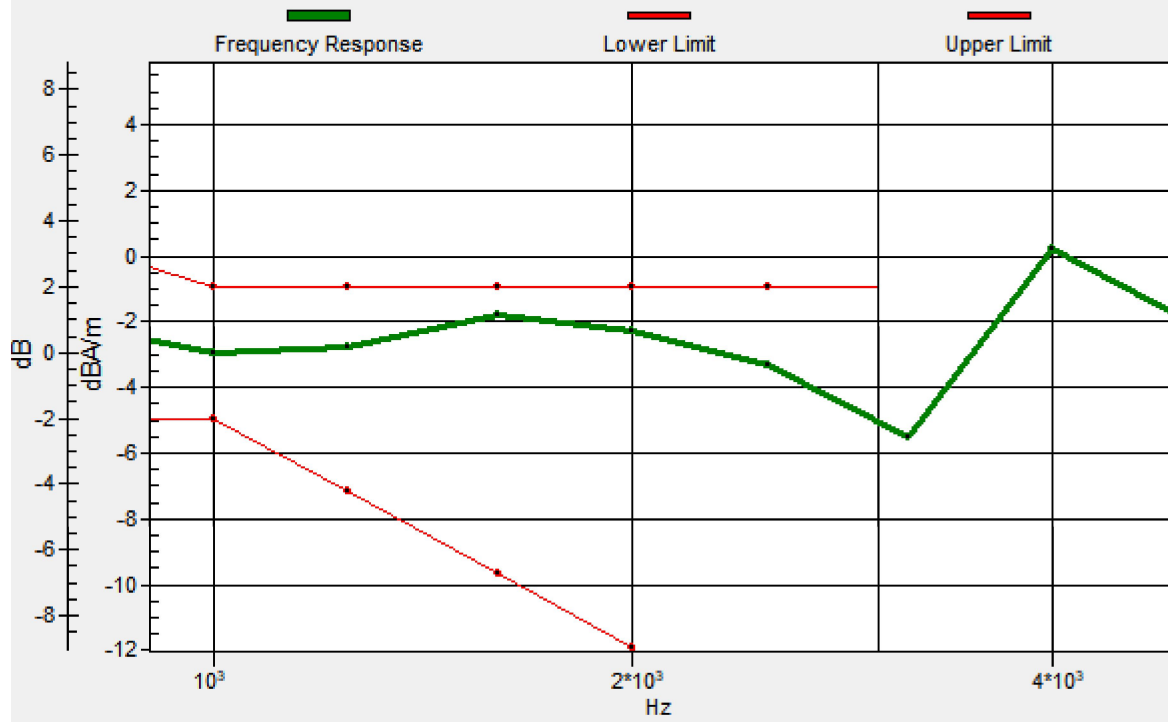
General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1):

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



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

Loc: -0.4, -2.1, 3.7 mm Diff: 0.86dB



P20 T-Coil_LTE 71_QPSK20M_Ch133332_1RB_OS0_EVS NB 5.9kbps_Axial (Z)

Communication System: LTE; Frequency: 684 MHz; Duty Cycle: 1:1

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

Ambient Temperature : 23.2°C

DASY5 Configuration:

- Probe: AM1DV3 - 3144; ; Calibrated: 9/21/2020
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1633; Calibrated: 9/28/2020
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

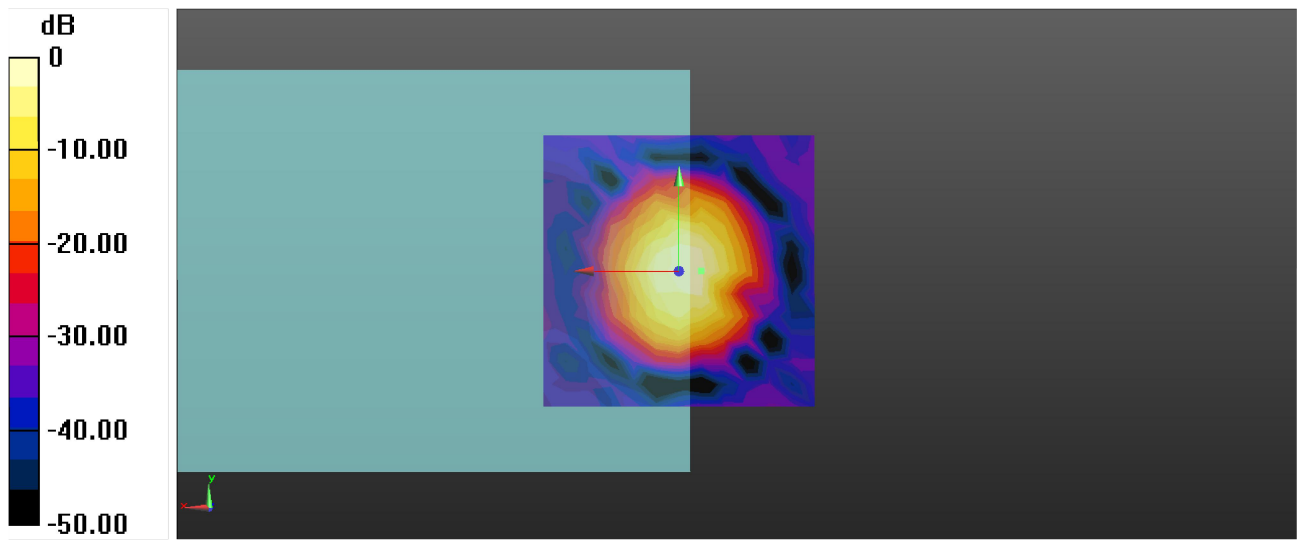
General Scans/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1): Measurement grid:

dx=10mm, dy=10mm

ABM1/ABM2 = 50.03 dB

ABM1 comp = -0.07 dBA/m

Location: -4.2, 0, 3.7 mm



0 dB = 317.3 = 50.03 dB

P20 T-Coil_LTE 71_QPSK20M_Ch133332_1RB_OS0_EVS NB 5.9kbps_Radial (Y)

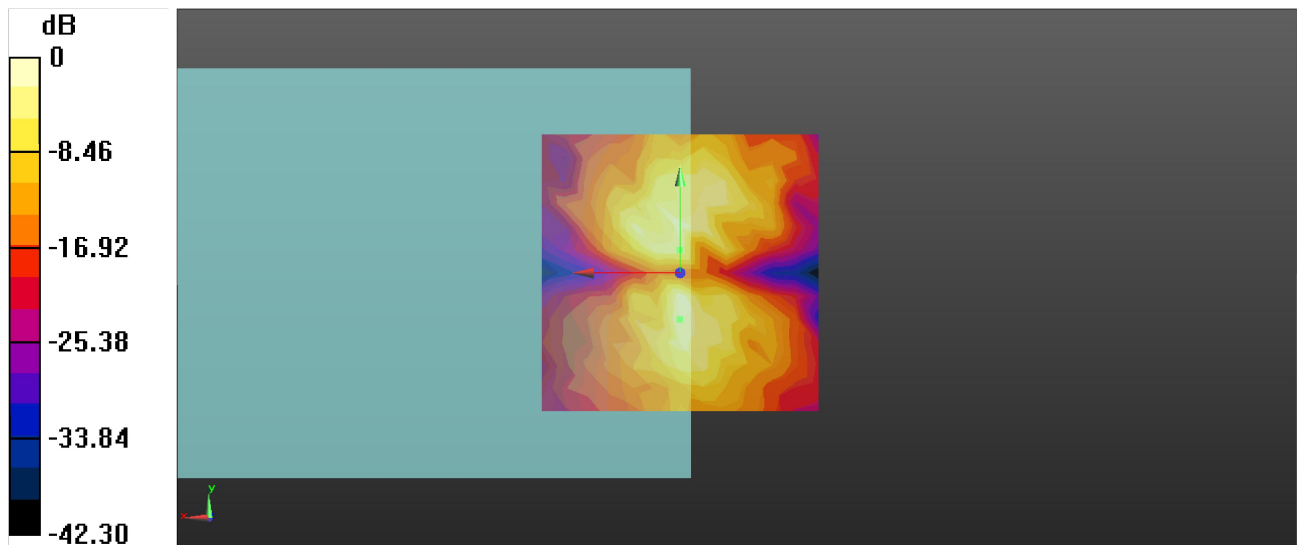
Communication System: LTE; Frequency: 684 MHz; Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³
Ambient Temperature : 23.2°C

DASY5 Configuration:

- Probe: AM1DV3 - 3144; ; Calibrated: 9/21/2020
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1633; Calibrated: 9/28/2020
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

General Scans/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x13x1):

Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 42.95 dB
ABM1 comp = -9.19 dBA/m
Location: 0, 4.2, 3.7 mm



0 dB = 140.5 = 42.95 dB

P20 T-Coil_LTE 71_QPSK20M_Ch133332_1RB_OS0_EVS NB 5.9kbps_Freq Resp

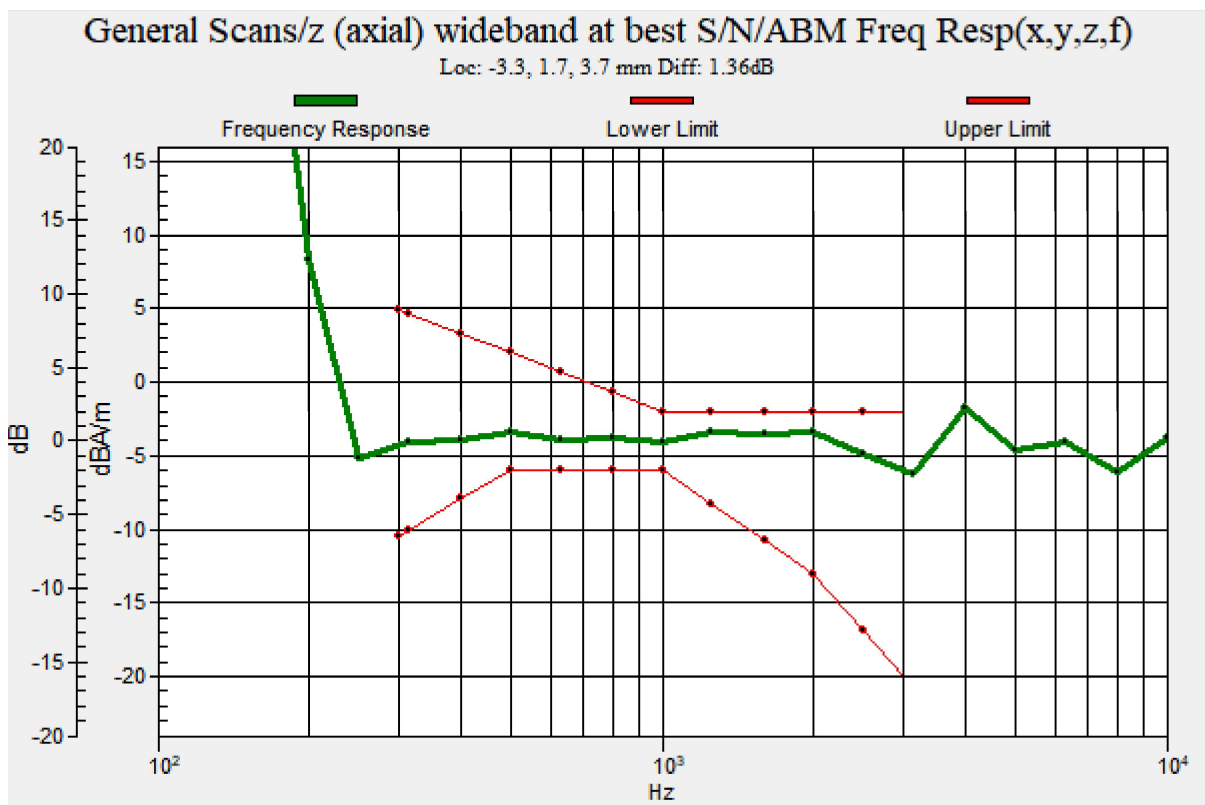
Communication System: LTE; Frequency: 684 MHz; Duty Cycle: 1:1
 Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³
 Ambient Temperature : 23.2°C

DASY5 Configuration:

- Probe: AM1DV3 - 3144; ; Calibrated: 9/21/2020
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1633; Calibrated: 9/28/2020
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

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

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



Appendix B. Calibration Certificate for Probe

The SPEAG calibration certificates are shown as follows.



Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **7 layers (Auden)**

Certificate No: **AM1DV3-3144_Sep20**

CALIBRATION CERTIFICATE

Object **AM1DV3 - SN: 3144**

Calibration procedure(s) **QA CAL-24.v4
Calibration procedure for AM1D magnetic field probes and TMFS in the
audio range**

Calibration date: **September 21, 2020**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Keithley Multimeter Type 2001	SN: 0810278	07-Sep-20 (No. 28647)	Sep-21
Reference Probe AM1DV2	SN: 1008	10-Dec-19 (No. AM1DV2-1008_Dec19)	Dec-20
DAE4	SN: 781	27-Dec-19 (No. DAE4-781_Dec19)	Dec-20

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
AMCC	SN: 1050	01-Oct-13 (in house check Oct-17)	Oct-20
AMMI Audio Measuring Instrument	SN: 1062	26-Sep-12 (in house check Oct-17)	Oct-20

	Name	Function	Signature
Calibrated by:	Leif Klysner	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: September 24, 2020

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.