



TEST REPORT

No.I18N00673-HAC T-coil

For

Spectralink Corp

GSM Quad-band/UMTS five-band/LTE/CA Mobile phone

Model Name: 9653

With

Hardware Version: PIO

Software Version: vF03

FCC ID: IYG96XX

Results Summary: T Category = T3

Issued Date: 2018-07-26

Designation Number: CN1210

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of SAICT.

Test Laboratory:

Shenzhen Academy of Information and Communications Technology
Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen,
Guangdong, P. R. China 518026.

Tel: +86(0)755-33322000, Fax: +86(0)755-33322001

Email: yewu@caict.ac.cn, website: www.cszit.com

REPORT HISTORY

Report Number	Revision	Issue Date	Description
I18N00673-HAC T-coil	Rev.0	2018-07-26	Initial creation of test report

TABLE OF CONTENT

1 TEST LABORATORY	4
1.1 TESTING LOCATION	4
1.2 TESTING ENVIRONMENT	4
1.3 PROJECT DATA	4
1.4 SIGNATURE	4
2 CLIENT INFORMATION	5
2.1 APPLICANT INFORMATION.....	5
2.2 MANUFACTURER INFORMATION	5
3 EQUIPMENT UNDER TEST (EUT) AND ANCILLARY EQUIPMENT (AE)	6
3.1 ABOUT EUT	6
3.2 INTERNAL IDENTIFICATION OF EUT USED DURING THE TEST	6
3.3 INTERNAL IDENTIFICATION OF AE USED DURING THE TEST	6
3.4 AIR INTERFACES AND OPERATING MODES.....	7
4. APPLIED STANDARDS	7
5 OPERATIONAL CONDITIONS DURING TEST	8
5.1 HAC MEASUREMENT SET-UP	8
5.2 AM1D PROBE	10
5.3 AMCC.....	10
5.4 AMMI.....	10
5.5 TEST ARCH PHANTOM & PHONE POSITIONER	11
5.6 ROBOTIC SYSTEM SPECIFICATIONS.....	12
5.7 T-COIL MEASUREMENT POINTS AND REFERENCE PLANE	12
6 T-COIL TEST PROCEDURES.....	14
7 T-COIL PERFORMANCE REQUIREMENTS.....	15
7.1 T-COIL COUPLING FIELD INTENSITY.....	15
7.2 FREQUENCY RESPONSE.....	15
8 T-COIL TESTING FOR CMRS VOICE	17
8.1 GSM TESTS RESULTS.....	17
8.2 UMTS TESTS RESULTS.....	17
9. T-COIL TESTING FOR OTT VOIP CALLING	18
9.1 TESTS RESULTS FOR OTT OVER LTE.....	18
9.2 TESTS RESULTS FOR OTT OVER WIFI	20
10 MEASUREMENT UNCERTAINTY	22
11 MAIN TEST INSTRUMENTS	23
ANNEX A TEST PLOTS	24
ANNEX B FREQUENCY REPNSE CURVES.....	144
ANNEX C PROBE CALIBRATION CERTIFICATE.....	159

1 Test Laboratory

1.1 Testing Location

Company Name:	Shenzhen Academy of Information and Communications Technology
Address:	Building G, Shenzhen International Innovation Center, No.1006 Shennan Road, Futian District, Shenzhen, Guangdong, P. R. China
Postal Code:	518026
Telephone:	+86-755-33322000
Fax:	+86-755-33322001

1.2 Testing Environment

Temperature:	18°C ~ 25°C
Relative humidity:	30% ~ 70%
Ground system resistance:	<4Ω
Ambient noise & Reflection:	< 0.012 W/kg

1.3 Project Data

Testing Start Date:	June 22, 2018
Testing End Date:	July 10, 2018

1.4 Signature

Li Yongfu
(Prepared this test report)

Zhang Yunzhan
(Reviewed this test report)

Cao Junfei
Deputy Director of the laboratory
(Approved this test report)

2 Client Information

2.1 Applicant Information

Company Name:	Spectralink Corp
Address /Post:	2560 55th Street Boulder, CO 80301 USA
Contact:	Andrew Duncan
Email:	Andrew.duncan@spectralink.com
Telephone:	+1 720-925-0480
Fax:	/

2.2 Manufacturer Information

Company Name:	Spectralink Corp
Address /Post:	2560 55th Street Boulder, CO 80301 USA
Contact:	Andrew Duncan
Email:	Andrew.duncan@spectralink.com
Telephone:	+1 720-925-0480
Fax:	/

3 Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1 About EUT

Description:	GSM Quad-band/UMTS five-band/LTE/CA Mobile phone
Mode Name:	9653
Operating mode(s):	GSM 850/1900, WCDMA Band II / IV / V, LTE_ Band 2/4/5/7/12/13/25/26/38/66, BT, Wi-Fi 2.4G/5G

3.2 Internal Identification of EUT used during the test

EUT ID*	IMEI	HW Version	SW Version
EUT1	359940090001615	PIO	vF03

*EUT ID: is used to identify the test sample in the lab internally.

Note: It is performed to test HAC with the EUT1.

3.3 Internal Identification of AE used during the test

AE ID*	Description	Model	Manufacturer
AE1	Battery	Rechargeable Li-ion Polymer Battery	Zhuhai City Gushine Electronic Technology Co., Ltd.
AE1	Battery	Rechargeable Li-ion Polymer Battery	Smart Power Electronic (huizhou) Co., Ltd.

*AE ID: is used to identify the test sample in the lab internally.

Note: The AE2 battery is for system maintenance, do not affect the EUT's working condition.

3.4 Air Interfaces and Operating Modes

Air-interface	Band(MHz)	Type	C63.19 / tested	Simultaneous Transmissions	Name of Voice Service	Power Reduction
GSM	850 /1900	VO	Yes	BT,WLAN	CMRS Voice ¹	No
GPRS/EDGE	850 /1900	DT	No		No	
WCDMA (UMTS)	B2 / B4 / B5	VO	Yes	BT,WLAN	CMRS Voice ¹	No
	HSPA	DT	No		No	
LTE	2/4/5/7/12/ 13/25/26/38/66	DT	No	BT,WLAN	BizPhone ²	No
WLAN	2.4G	DT	No	WWAN	BizPhone ²	No
WLAN	5G	DT	No	WWAN	BizPhone ²	No
BT	2.4G	DT	No	WWAN	No	No

Note:

1. Ref Lev in accordance with 7.4.2.1 of ANSI C63.19-2011.
2. Ref Lev -20dBm0

VO: Voice Only

DT: Digital Transport only (no voice)

VD: CMRS and IP Voice Service over Digital Transport

* HAC Rating was not based on concurrent voice and data modes; Non-current mode was found to represent worst case rating for both M and T rating

4. Reference Documents

ANSI C63.19-2011: American National Standard for Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids

FCC KDB 285076 D01v05: Equipment Authorization Guidance for Hearing Aid Compatibility

FCC KDB 285076 D02v03: Guidance for performing T-Coil tests for air interfaces supporting voice over IP (e.g., LTE and WiFi) to support CMRS based telephone services

5 Operational Conditions during Test

5.1 HAC Measurement Set-up

These measurements are performed using the DASY5 NEO automated dosimetric assessment system. It is made by Schmid & Partner Engineering AG (SPEAG) in Zurich, Switzerland. It consists of high precision robotics system (Stäubli), robot controller, Intel Core2 computer, near-field probe, probe alignment sensor. The robot is a six-axis industrial robot performing precise movements. A cell controller system contains the power supply, robot controller, teach pendant (Joystick), and remote control, is used to drive the robot motors. The PC consists of the HP Intel Core2 1.86 GHz computer with Windows XP system and HAC Measurement Software DASY5 NEO, A/D interface card, monitor, mouse, and keyboard. The Stäubli Robot is connected to the cell controller to allow software manipulation of the robot. A data acquisition electronic (DAE) circuit performs the signal amplification; signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical into digital electric signal of the DAE and transfers data to the PC plug-in card.

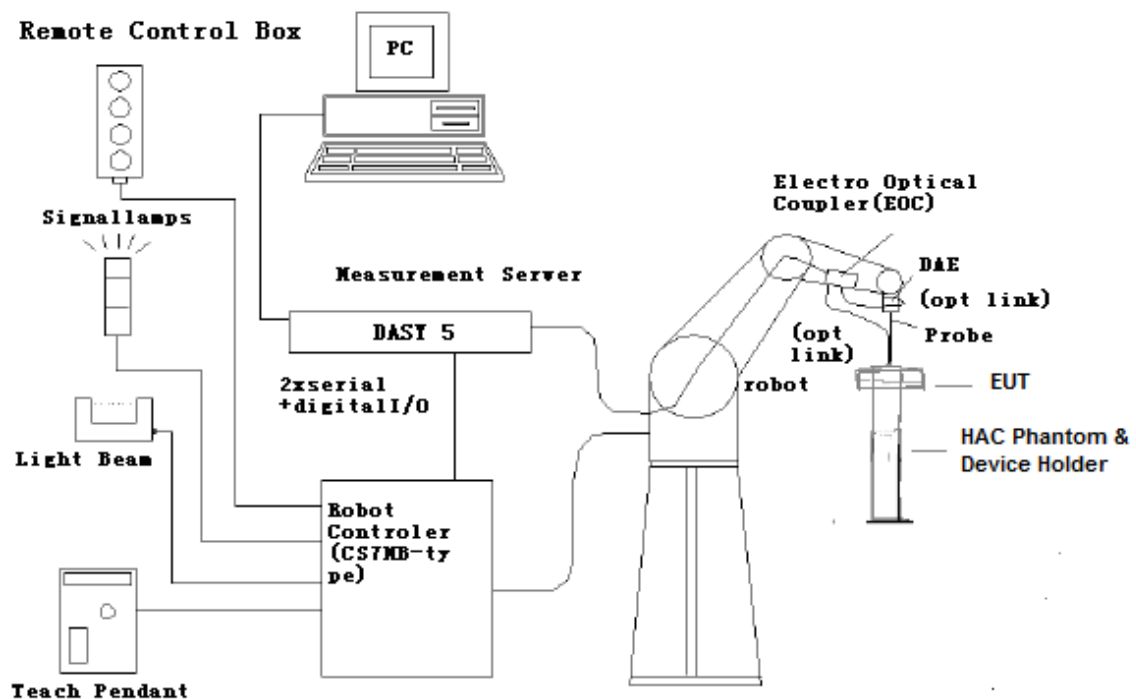


Figure 5.1 HAC Test Measurement Set-up

The DAE4 consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection. The robot uses its own controller with a built in VME-bus computer.

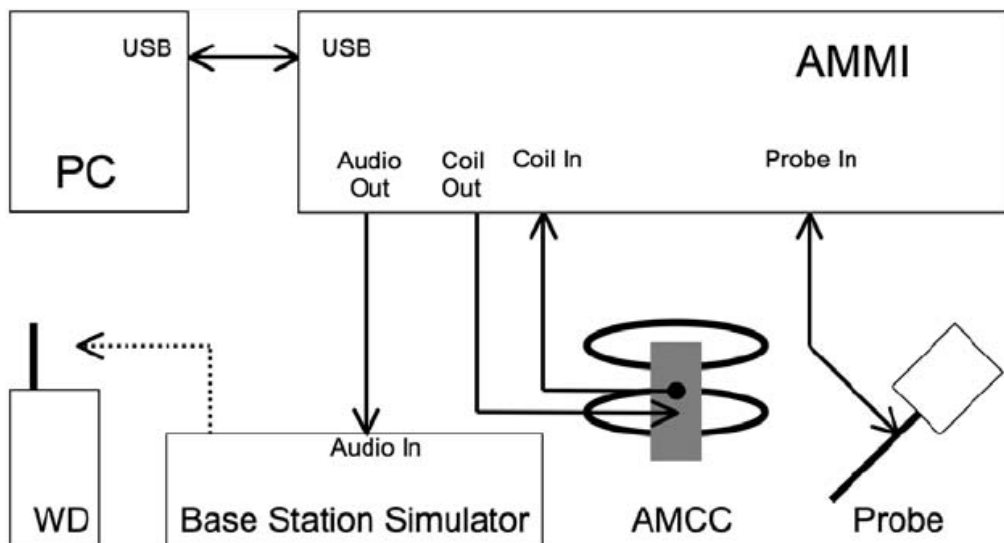


Figure 5.2 T-Coil setup with HAC Test Arch and AMCC

5.2 AM1D probe

The AM1D probe is an active probe with a single sensor. It is fully RF-shielded and has a rounded tip 6mm in diameter incorporating a pickup coil with its center offset 3mm from the tip and the sides. The symmetric signal preamplifier in the probe is fed via the shielded symmetric output cable from the AMMI with a 48V "phantom" voltage supply. The 7-pin connector on the back in the axis of the probe does not carry any signals. It is mounted to the DAE for the correct orientation of the sensor. If the probe axis is tilted 54.7 degree from the vertical, the sensor is approximately vertical when the signal connector is at the underside of the probe (cable hanging downwards).

Specification:

Frequency range	0.1~20kHz (RF sensitivity < -100dB, fully RF shielded)
Sensitivity	< -50dB A/m @ 1kHz
Pre-amplifier	40dB, symmetric
Dimensions	Tip diameter/length: 6/290mm, sensor according to ANSI-C63.19

5.3 AMCC

The Audio Magnetic Calibration coil is a Helmholtz Coil designed for calibration of the AM1D probe. The two horizontal coils generate a homogeneous magnetic field in the z direction. The DC input resistance is adjusted by a series resistor to approximately 50Ohm, and a shunt resistor of 10Ohm permits monitoring the current with a scale of 1:10

Port description:

Signal	Connector	Resistance
Coil In	BNC	Typically 50Ohm
Coil Monitor	BNO	10Ohm±1% (100mV corresponding to 1 A/m)

Specification:

Dimensions	370 x 370 x 196 mm, according to ANSI-C63.19
-------------------	--

5.4 AMMI



Figure 5.3 AMMI front panel

The Audio Magnetic Measuring Instrument (AMMI) is a desktop 19-inch unit containing a sampling unit, a waveform generator for test and calibration signals, and a USB interface.

Specification:

Sampling rate	48 kHz / 24 bit
Dynamic range	85 dB
Test signal generation	User selectable and predefined (vis PC)
Calibration	Auto-calibration / full system calibration using AMCC with monitor output
Dimensions	482 x 65 x 270 mm

5.5 Test Arch Phantom & Phone Positioner

The Test Arch phantom should be positioned horizontally on a stable surface. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot. It enables easy and well defined positioning of the phone and validation dipoles as well as simple teaching of the robot (Dimensions: 370 x 370 x 370 mm).

The Phone Positioner supports accurate and reliable positioning of any phone with effect on near field $\leq \pm 0.5$ dB.

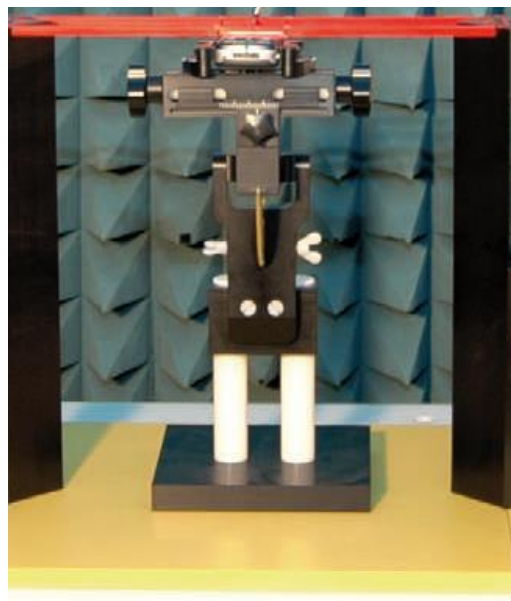


Figure 5.4 HAC Phantom & Device Holder

5.6 Robotic System Specifications

Specifications

Positioner: Stäubli Unimation Corp. Robot Model: RX160L

Repeatability: ± 0.02 mm

No. of Axis: 6

Data Acquisition Electronic (DAE) System

Cell Controller

Processor: Intel Core2

Clock Speed: 1.86 GHz

Operating System: Windows XP

Data Converter

Features: Signal Amplifier, multiplexer, A/D converter, and control logic

Software: DASY5 software

Connecting Lines: Optical downlink for data and status info.

Optical uplink for commands and clock

5.7 T-Coil measurement points and reference plane

Figure 6.5 illustrates the standard probe orientations. Position 1 is the perpendicular orientation of the probe coil; orientation 2 is the transverse orientations. The space between the measurement positions is not fixed. It is recommended that a scan of the WD be done for each probe coil orientation and that the maximum level recorded be used as the reading for that orientation of the probe coil.

- 1) The reference plane is the planar area that contains the highest point in the area of the phone that normally rests against the user's ear. It is parallel to the centerline of the receiver area of the phone and is defined by the points of the receiver-end of the WD handset, which, in normal handset use, rest against the ear.
- 2) The measurement plane is parallel to, and 10 mm in front of, the reference plane.
- 3) The reference axis is normal to the reference plane and passes through the center of the receiver speaker section (or the center of the hole array); or may be centered on a secondary inductive source. The actual location of the measurement point shall be noted in the test report as the measurement reference point.
- 4) The measurement points may be located where the axial and radial field intensity measurements are optimum with regard to the requirements. However, the measurement points should be near the acoustic output of the WD and shall be located in the same half of the phone as the WD receiver. In a WD handset with a centered receiver and a circularly symmetrical magnetic field, the measurement axis and the reference axis would coincide.
- 5) The relative spacing of each measurement orientation is not fixed. The axial and two radial orientations should be chosen to select the optimal position.
- 6) The measurement point for the axial position is located 10 mm from the reference plane on the measurement axis. The actual location of the measurement point shall be noted in test reports and designated as the measurement reference point.

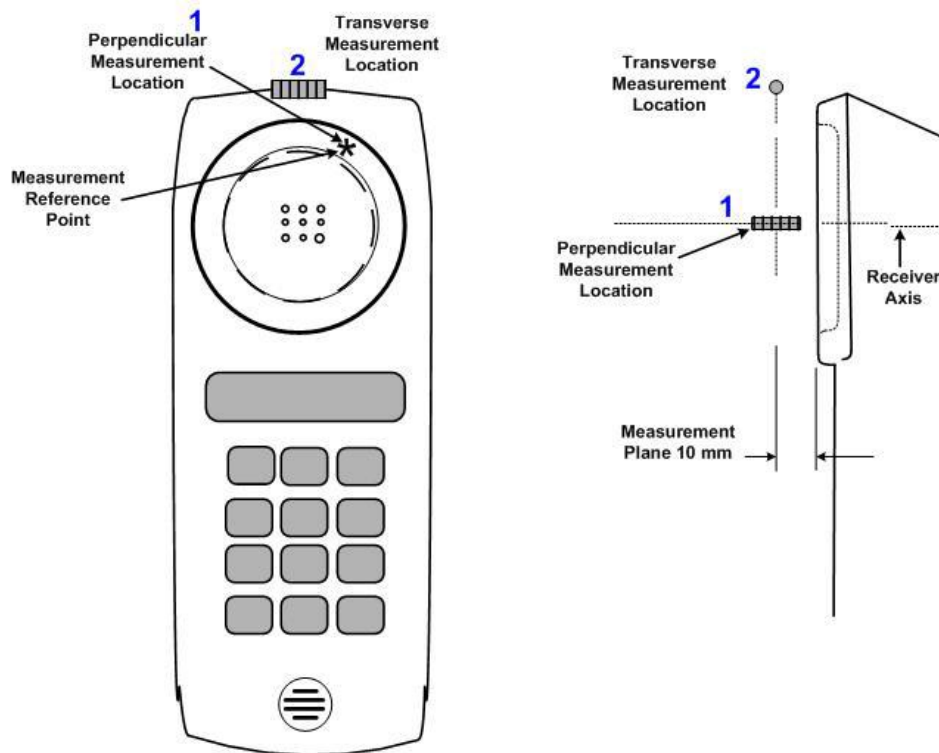


Figure 5.5 Axis and planes for WD audio frequency magnetic field measurements

6 T-Coil Test Procedures

The following illustrate a typical test scan over a wireless communications device:

- 1) Geometry and signal check: system probe alignment, proper operation of the field probe, probe measurement system, other instrumentation, and the positioning system was confirmed. A surface calibration was performed before each setup change to ensure repeatable spacing and proper maintenance of the measurement plane using the test Arch.
- 2) Set the reference drive level of signal voice defined in C63.19 per 7.4.2.1.
- 3) The ambient and test system background noise (dB A/m) was measured as well as ABM2 over the full measurement. The maximum noise level must be at least 10dB below the limit.
- 4) The DUT was positioned in its intended test position, acoustic output point of the device perpendicular to the field probe.
- 5) The DUT operation for maximum rated RF output power was configured and connected by using of coaxial cable connection to the base station simulator at the test channel and other normal operating parameters as intended for the test. The battery was ensured to be fully charged before each test. The center sub-grid was centered over the center of the acoustic output (also audio band magnetic output, if applicable). The DUT audio output was positioned tangent (as physically possible) to the measurement plane.
- 6) The DUT's RF emission field was eliminated from T-coil results by using a well RF-shielding of the probe, AM1D, and by using of coaxial cable connection to a Base Station Simulator. One test channel was pre-measurement to avoid this possibility.
- 7) Determined the optimal measurement locations for the DUT by following the three steps, coarse resolution scan, fine resolution scans, and point measurement, as described in C63.19 per 7.4.4.2. At each measurement locations, samples in the measurement window duration were evaluated to get ABM1 and the signal spectrum. The noise measurement was performed after the scan with the signal, the same happened, just with the voice signal switched off. The ABM2 was calculated from this second scan.
- 8) All results resulting from a measurement point in a T-Coil job were calculated from the signal samples during this window interval. ABM values were averaged over the sequence of there samples.
- 9) At an optimal point measurement, the SNR (ABM1/ABM2) was calculated for perpendicular and transverse orientation, and the frequency response was measured for perpendicular.
- 10) Corrected for the frequency response after the DUT measurement since the DASY5 system had known the spectrum of the input signal by using a reference job.
- 11) In SEMCAD post processing, the spectral points are in addition scaled with the high-pass (half-band) and the A-weighting, bandwidth compensated factor (BWC) and those results are final as shown in this report.

7 T-Coil Performance Requirements

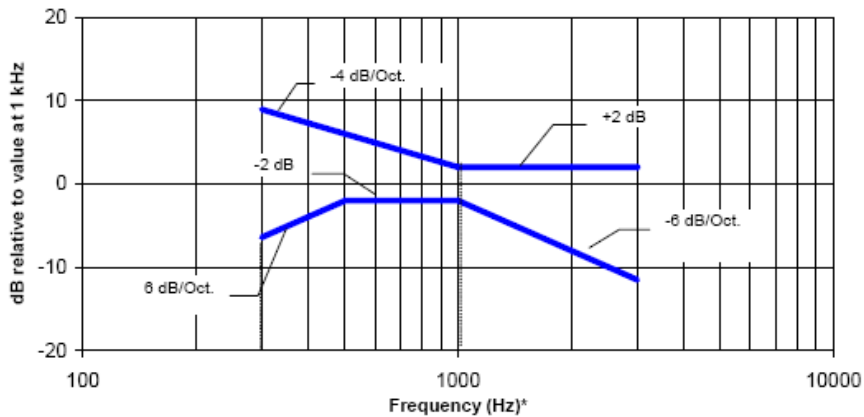
In order to be rated for T-Coil use, a WD shall meet the requirements for signal level and signal quality contained in this part.

7.1 T-Coil coupling field intensity

When measured as specified in ANSI C63.19, the T-Coil signal shall be ≥ -18 dB (A/m) at 1 kHz, in a 1/3 octave band filter for all orientations.

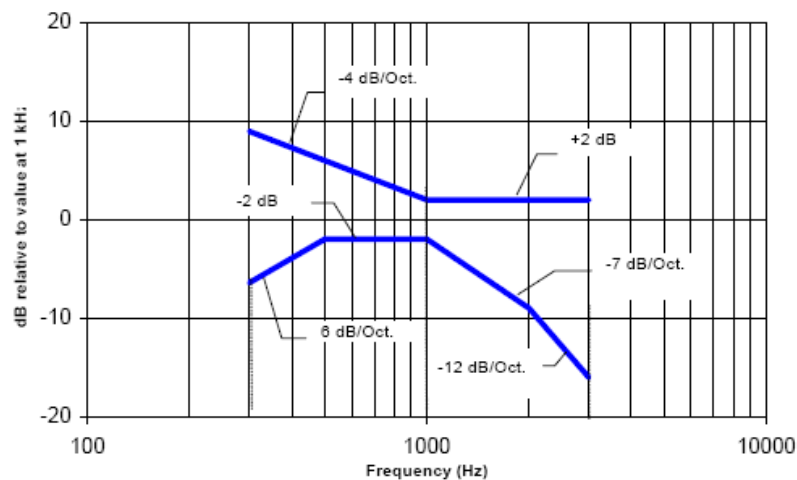
7.2 Frequency response

The frequency response of the axial component of the magnetic field, measured in 1/3 octave bands, shall follow the response curve specified in this sub-clause, over the frequency range 300 Hz to 3000 Hz. Figure 7.1 and Figure 7.2 provide the boundaries for the specified frequency. These response curves are for true field strength measurements of the T-Coil signal. Thus the 6 dB/octave probe response has been corrected from the raw readings.



NOTE—Frequency response is between 300 Hz and 3000 Hz.

Figure 7.1—Magnetic field frequency response for WDs with a field ≤ -15 dB (A/m) at 1 kHz



NOTE—Frequency response is between 300 Hz and 3000 Hz.

Figure 7.2—Magnetic field frequency response for WDs with a field that exceeds -15 dB(A/m) at 1 kHz

7.3 Signal quality

This part provides the signal quality requirement for the intended T-Coil signal from a WD. Only the RF immunity of the hearing aid is measured in T-Coil mode. It is assumed that a hearing aid can have no immunity to an interference signal in the audio band, which is the intended reception band for this mode. So, the only criteria that can be measured is the RF immunity in T-Coil mode. This is measured using the same procedure as for the audio coupling mode and at the same levels. The worst signal quality of the three T-Coil signal measurements shall be used to determine the T-Coil mode category per Table 1

Table 1: T-Coil signal quality categories

Category	Telephone parameters WD signal quality [(signal + noise) – to – noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

8 T-Coil testing for CMRS Voice

General Note:

1. The middle channel of each frequency band is used for T-Coil testing according ANSI C63.19 2011.
2. Choose worst case from radio configuration investigation. After investigation was performed to determine the audio codec configuration to be used for testing, the following tests results which the worst case codec would be remarked to be used for the testing for the handset.

8.1 GSM Tests Results

<Codec Investigation>

codec	FR VR	HR V1	Orientation	Band / Channel
ABM 1 (dBA/m)	5.55	5.36	Axial	GSM850 / 190
Freq. Response	Pass	Pass		
SNR (dB)	26.55	28.42		

<Summary Tests Results>

Plot No.	Air Interface	Mode	Channel	Probe Position	ABM1 dB (A/m)	SNR (dB)	T Rating	Frequency Response
1	GSM850	CMRS Voice	190	Axial (Z)	5.55	26.55	T3	Pass
				Transverse (Y)	-1.52	37.29	T4	
2	GSM1900	CMRS Voice	661	Axial (Z)	5.44	30.33	T4	Pass
				Transverse (Y)	-2.95	37.90	T4	

8.2 UMTS Tests Results

<Codec Investigation>

codec	AMR 12.2Kbps	AMR 7.95Kbps	AMR 4.75Kbps	Orientation	Band / Channel
ABM 1 (dBA/m)	7.36	7.22	1.28	Axial	Band 2 / 9400
Freq. Response	Pass	Pass	Pass		
SNR (dB)	46.62	47.53	47.69		

<Summary Tests Results>

Plot No.	Air Interface	Mode	Channel	Probe Position	ABM1 dB (A/m)	SNR (dB)	T Rating	Frequency Response
3	Band 2	AMR 12.2Kbps	9400	Axial (Z)	7.36	46.62	T4	Pass
				Transverse (Y)	3.07	43.55	T4	
4	Band 4	AMR 12.2Kbps	1413	Axial (Z)	8.99	47.41	T4	Pass
				Transverse (Y)	4.44	49.00	T4	
5	Band 5	AMR 12.2Kbps	4182	Axial (Z)	8.14	50.27	T4	Pass
				Transverse (Y)	4.00	48.11	T4	

9. T-Coil testing for OTT VoIP Calling

1. The BizPhone VoIP call software is pre-installed on this device and head-to-ear scenario should be consideration. According to KDB 285076 D02, all air interfaces via a data connection with BizPhone VoIP calling would be consideration to be tested.
2. The test setup used for OTT VoIP call is via the data application unit on CMW500 connection to the Internet, also connection to the other auxiliary VoIP unit which is used to configure the audio codec and bit rate and also monitor the audio input level of -20dBm0.
3. For LTE or WiFi VoIP radio configuration investigation is choose either one codec and an investigation was performed on all frequency band, data rates and modulations and RB configuration to determine the radio configuration to be used for testing, the following tests results which the worst case configuration would be remarked to be used for the testing for the handset.
4. Choose worst case from radio configuration investigation. After investigation was performed to determine the audio codec configuration to be used for testing, the following tests results which the worst case codec would be remarked to be used for the testing for the handset.

9.1 Tests Results for OTT over LTE

<Radio Configuration Investigation>

Mode	Bandwidth (MHz)	Modulation	RB size	RB offset	channel	ABM1 dB (A/m)	SNR (dB)
LTE B2	20	QPSK	1	0	18900	20.12	51.33
LTE B2	20	QPSK	50	0	18900	20.47	51.49
LTE B2	20	QPSK	100	0	18900	20.33	51.57
LTE B2	20	16QAM	1	0	18900	20.18	51.66
LTE B2	15	QPSK	1	0	18900	20.24	51.45
LTE B2	10	QPSK	1	0	18900	20.08	51.74
LTE B2	5	QPSK	1	0	18900	19.87	51.82
LTE B2	3	QPSK	1	0	18900	19.96	51.65
LTE B2	1.4	QPSK	1	0	18900	20.25	51.46

<AMR Codec Investigation>

codec	NB AMR 4.75kbps	NB AMR 6.60kbps	NB AMR 12.2kbps	NB AMR 23.85kbps	Orientation	Band / Channel
ABM 1 (dBA/m)	18.57	20.05	20.22	20.54	Axial	LTE B2 / 9400
Freq. Response	Pass	Pass	Pass	Pass		
SNR (dB)	52.48	51.66	51.35	52.07		

<EVS Codec Investigation>

codec	EVS SWB 9.6kbps	EVS SWB 13.2kbps	EVS WB 5.9kbps	EVS WB 13.2kbps	EVS NB 5.9kbps	EVS NB 13.2kbps	Orientation	Band / BW / Channel
ABM 1 (dBA/m)	19.86	20.16	19.55	19.64	19.47	20.05	Axial	LTE B2 / 20M / 9400
Freq. Response	Pass	Pass	Pass	Pass	Pass	Pass		
SNR (dB)	51.68	51.54	51.38	51.77	52.03	51.82		

<Summary Tests Results>

Plot No.	Air Interface	Mode	Channel	Probe Position	ABM1 dB (A/m)	SNR (dB)	T Rating	Frequency Response
6	LTE B2	20M_QPSK_1RB_ Offset_AMR 12.2Kbps	18900	Axial (Z)	20.12	51.33	T4	Pass
				Transversal (Y)	13.92	49.79	T4	
7	LTE B4	20M_QPSK_1RB_ Offset_AMR 12.2Kbps	20175	Axial (Z)	18.57	50.28	T4	Pass
				Transversal (Y)	12.34	49.46	T4	
8	LTE B5	20M_QPSK_1RB_ Offset_AMR 12.2Kbps	20525	Axial (Z)	17.22	50.34	T4	Pass
				Transversal (Y)	12.59	48.83	T4	
9	LTE B7	20M_QPSK_1RB_ Offset_AMR 12.2Kbps	21100	Axial (Z)	17.23	50.44	T4	Pass
				Transversal (Y)	11.39	48.84	T4	
10	LTE B12	20M_QPSK_1RB_ Offset_AMR 12.2Kbps	23095	Axial (Z)	18.96	51.03	T4	Pass
				Transversal (Y)	12.96	49.38	T4	
11	LTE B13	20M_QPSK_1RB_ Offset_AMR 12.2Kbps	23230	Axial (Z)	14.71	50.53	T4	Pass
				Transversal (Y)	11.92	49.49	T4	
12	LTE B25	20M_QPSK_1RB_ Offset_AMR 12.2Kbps	26365	Axial (Z)	17.18	50.75	T4	Pass
				Transversal (Y)	13.39	49.21	T4	
13	LTE B26	20M_QPSK_1RB_ Offset_AMR 12.2Kbps	26865	Axial (Z)	18.19	50.05	T4	Pass
				Transversal (Y)	11.63	49.16	T4	
14	LTE B38	20M_QPSK_1RB_ Offset_AMR 12.2Kbps	38000	Axial (Z)	17.91	45.19	T4	Pass
				Transversal (Y)	8.05	45.19	T4	
15	LTE B66	20M_QPSK_1RB_ Offset_AMR 12.2Kbps	132322	Axial (Z)	14.24	50.09	T4	Pass
				Transversal (Y)	11.09	48.45	T4	

9.2 Tests Results for OTT over WIFI

<Radio Configuration Investigation> - Main antenna

Mode	Bandwidth	Data rate	channel	ABM1 dB (A/m)	SNR (dB)
802.11b	20	1M	6	20.84	50.25
802.11b	20	11M	6	18.66	50.47
802.11g	20	6M	6	19.79	50.41
802.11g	20	54M	6	19.55	50.36
802.11n-HT20	20	MCS0	6	20.63	50.78
802.11n-HT20	20	MCS7	6	20.45	50.69
802.11n-HT40	40	MCS0	6	18.97	51.22
802.11n-HT40	40	MCS7	6	20.56	50.63
802.11a	20	6M	40	20.49	48.34
802.11a	20	54M	40	20.11	49.33
802.11n-HT20	20	MCS0	40	20.25	50.22
802.11n-HT20	20	MCS7	40	20.20	48.88
802.11n-HT40	40	MCS0	40	20.25	48.62
802.11n-HT40	40	MCS7	40	20.73	49.27
802.11ac	20	MCS0	40	20.19	50.06
802.11ac	20	MCS7	40	19.98	49.70
802.11ac	40	MCS0	40	20.33	48.75
802.11ac	40	MCS7	40	20.46	49.21
802.11ac	80	MCS0	40	20.24	49.55
802.11ac	80	MCS7	40	20.63	50.04

<Summary Tests Results> - WIFI (Main antenna)

Plot No.	Mode	Mode	Channel	Probe Position	ABM1 dB (A/m)	SNR (dB)	T Rating	Frequency Response
16	2.4GHz WLAN	80211b -1Mbps	6	Axial (Z)	20.82	50.17	T4	Pass
				Transverse (Y)	8.19	48.25	T4	
17	5.2GHz WLAN	80211a -6Mbps	40	Axial (Z)	21.25	48.25	T4	Pass
				Transverse (Y)	13.30	50.44	T4	
18	5.3GHz WLAN	80211a -6Mbps	60	Axial (Z)	13.07	48.11	T4	Pass
				Transverse (Y)	10.69	52.32	T4	
19	5.5GHz WLAN	80211a -6Mbps	124	Axial (Z)	15.14	47.02	T4	Pass
				Transverse (Y)	9.60	52.42	T4	
20	5.8GHz WLAN	80211a -6Mbps	157	Axial (Z)	5.64	49.74	T4	Pass
				Transverse (Y)	1.82	50.96	T4	

<Summary Tests Results> - WIFI (Second antenna)

Plot No.	Mode	Mode	Channel	Probe Position	ABM1 dB (A/m)	SNR (dB)	T Rating	Frequency Response
21	2.4GHz WLAN	80211b -1Mbps	6	Axial (Z)	21.15	40.01	T4	Pass
				Transverse (Y)	8.32	45.13	T4	
22	5.2GHz WLAN	80211a -6Mbps	40	Axial (Z)	3.17	44.03	T4	Pass
				Transverse (Y)	9.10	51.22	T4	
23	5.3GHz WLAN	80211a -6Mbps	60	Axial (Z)	0.09	44.62	T4	Pass
				Transverse (Y)	9.11	50.37	T4	
24	5.5GHz WLAN	80211a -6Mbps	124	Axial (Z)	4.97	43.76	T4	Pass
				Transverse (Y)	12.15	52.01	T4	
25	5.8GHz WLAN	80211a -6Mbps	157	Axial (Z)	-0.09	45.07	T4	Pass
				Transverse (Y)	13.02	51.94	T4	

<Summary Tests Results> - WIFI (MIMO)

Plot No.	Mode	Mode	Channel	Probe Position	ABM1 dB (A/m)	SNR (dB)	T Rating	Frequency Response
26	2.4GHz WLAN	80211b -1Mbps	6	Axial (Z)	20.72	31.11	T4	Pass
				Transverse (Y)	10.44	38.18	T4	
27	5.2GHz WLAN	80211a -6Mbps	40	Axial (Z)	16.11	43.51	T4	Pass
				Transverse (Y)	11.31	48.79	T4	
28	5.3GHz WLAN	80211a -6Mbps	60	Axial (Z)	17.85	42.49	T4	Pass
				Transverse (Y)	3.94	49.03	T4	
29	5.5GHz WLAN	80211a -6Mbps	124	Axial (Z)	19.46	46.38	T4	Pass
				Transverse (Y)	1.10	49.65	T4	
30	5.8GHz WLAN	80211a -6Mbps	157	Axial (Z)	18.66	45.97	T4	Pass
				Transverse (Y)	6.50	50.24	T4	

10 Measurement Uncertainty

No.	Error source	Type	Uncertainty Value a_i (%)	Prob. Dist.	Div.	ABM1 c_i	ABM2 c_i	Std. Unc. ABM1 u_i (%)	Std. Unc. ABM2 u_i (%)
1	System Repeatability	A	0.016	N	1	1	1	0.016	0.016
Probe Sensitivity									
2	Reference Level	B	3.0	R	$\sqrt{3}$	1	1	3.0	3.0
3	AMCC Geometry	B	0.4	R	$\sqrt{3}$	1	1	0.2	0.2
4	AMCC Current	B	0.6	R	$\sqrt{3}$	1	1	0.4	0.4
5	Probe Positioning during Calibration	B	0.1	R	$\sqrt{3}$	1	1	0.1	0.1
6	Noise Contribution	B	0.7	R	$\sqrt{3}$	0.014 3	1	0.0	0.4
7	Frequency Slope	B	5.9	R	$\sqrt{3}$	0.1	1	0.3	3.5
Probe System									
8	Repeatability / Drift	B	1.0	R	$\sqrt{3}$	1	1	0.6	0.6
9	Linearity / Dynamic Range	B	0.6	N	1	1	1	0.4	0.4
10	Acoustic Noise	B	1.0	R	$\sqrt{3}$	0.1	1	0.1	0.6
11	Probe Angle	B	2.3	R	$\sqrt{3}$	1	1	1.4	1.4
12	Spectral Processing	B	0.9	R	$\sqrt{3}$	1	1	0.5	0.5
13	Integration Time	B	0.6	N	1	1	5	0.6	3.0
14	Field Distribution	B	0.2	R	$\sqrt{3}$	1	1	0.1	0.1
Test Signal									
15	Ref. Signal Spectral Response	B	0.6	R	$\sqrt{3}$	0	1	0.0	0.4
Positioning									
16	Probe Positioning	B	1.9	R	$\sqrt{3}$	1	1	1.1	1.1
17	Phantom Thickness	B	0.9	R	$\sqrt{3}$	1	1	0.5	0.5
18	DUT Positioning	B	1.9	R	$\sqrt{3}$	1	1	1.1	1.1
External Contributions									
19	RF Interference	B	0.0	R	$\sqrt{3}$	1	0.3	0.0	0.0
20	Test Signal Variation	B	2.0	R	$\sqrt{3}$	1	1	1.2	1.2
Combined Std. Uncertainty (ABM Field)		$u_c = \sqrt{\sum_{i=1}^{20} c_i^2 u_i^2}$						4.1	6.1
Expanded Std. Uncertainty		$u_e = 2u_c$	N	$k = 2$			8.2	12.2	

11 Main Test Instruments

Table 10-1: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Audio Magnetic 1D Field Probe	AM1DV3	3086	2018-02-22	Three year
02	Audio Magnetic Calibration Coil	AMCC	1105	/	/
03	Audio Measuring Instrument	AMMI	1121	/	/
04	HAC Test Arch	N/A	1150	/	/
05	DAE	DAE4	786	2017-11-22	One year
06	BTS	CMU200	114544	2017-09-04	One year
07	BTS	CMU500	152499	2017-07-20	One year

END OF REPORT BODY

ANNEX A Test Plots

T-Coil GSM 850 Axial

Date: 2018-6-22

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: GSM Frequency: 836.6 MHz Duty Cycle: 1:8.3

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 5.69 dBA/m

BWC Factor = 0.16 dB

Location: 0, -0.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

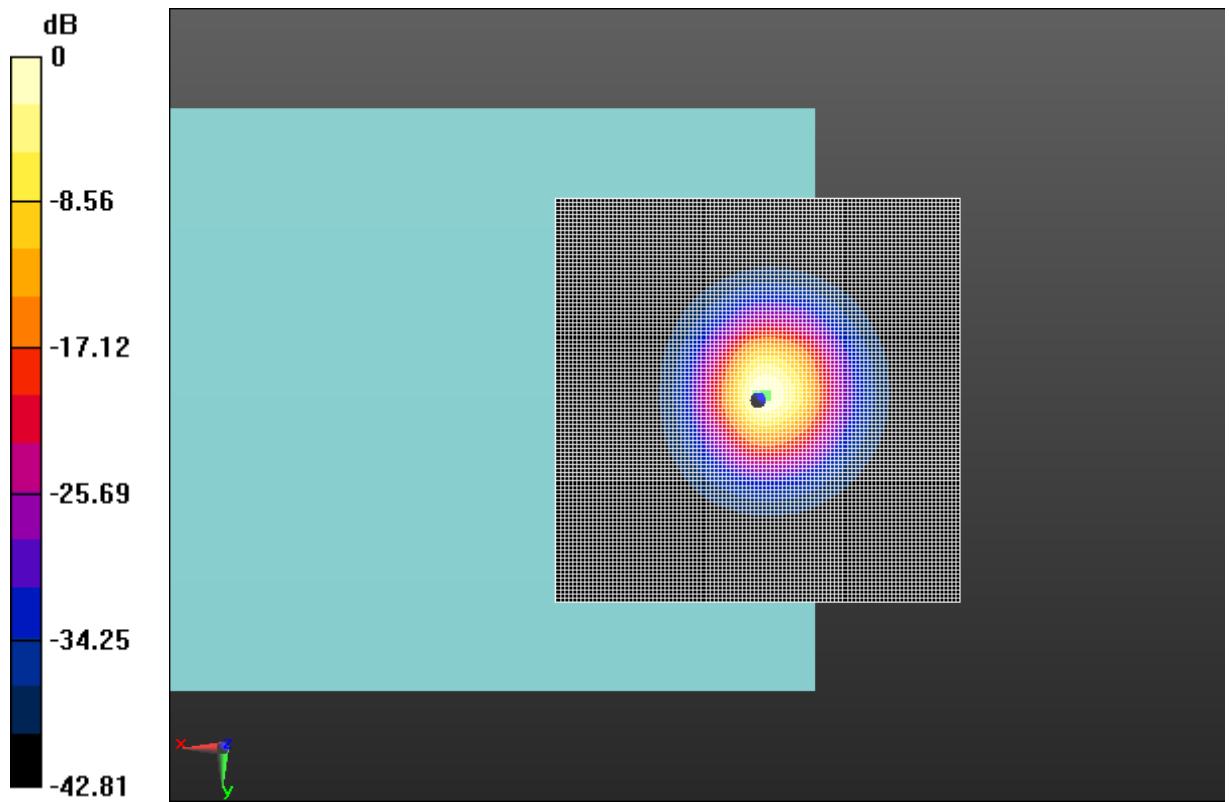
Cursor:

ABM1/ABM2 = 26.55 dB

ABM1 comp = 5.55 dBA/m

BWC Factor = 0.16 dB

Location: -1, -0.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.1 T-Coil GSM 850

T-Coil GSM 850 Transverse

Date: 2018-6-22

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: GSM Frequency: 836.6 MHz Duty Cycle: 1:8.3

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 0.57 dBA/m

BWC Factor = 0.16 dB

Location: -0.5, 5, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

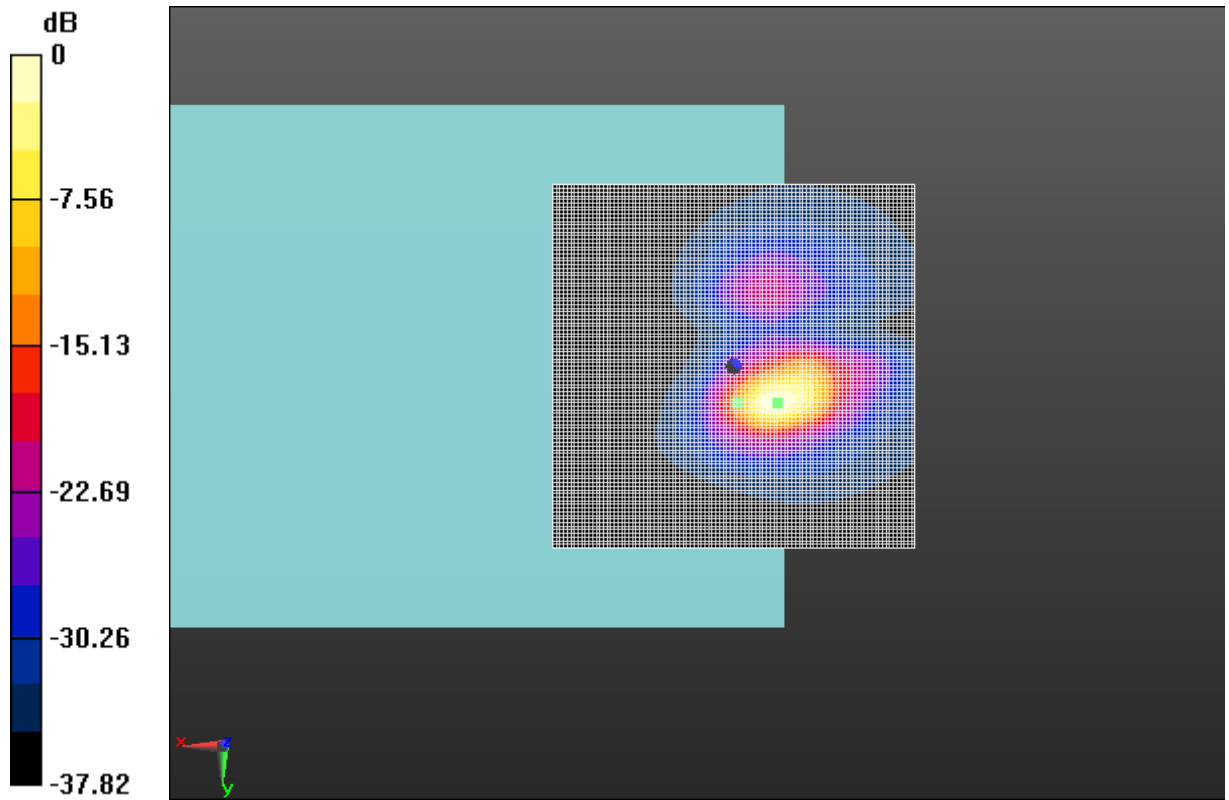
Cursor:

ABM1/ABM2 = 37.29 dB

ABM1 comp = -1.52 dBA/m

BWC Factor = 0.16 dB

Location: -6, 5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.2 T-Coil GSM 850

T-Coil GSM 1900 Axial

Date: 2018-6-22

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: GSM Frequency: 1880 MHz Duty Cycle: 1:8.3

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 5.55 dBA/m

BWC Factor = 0.16 dB

Location: 0, -1, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

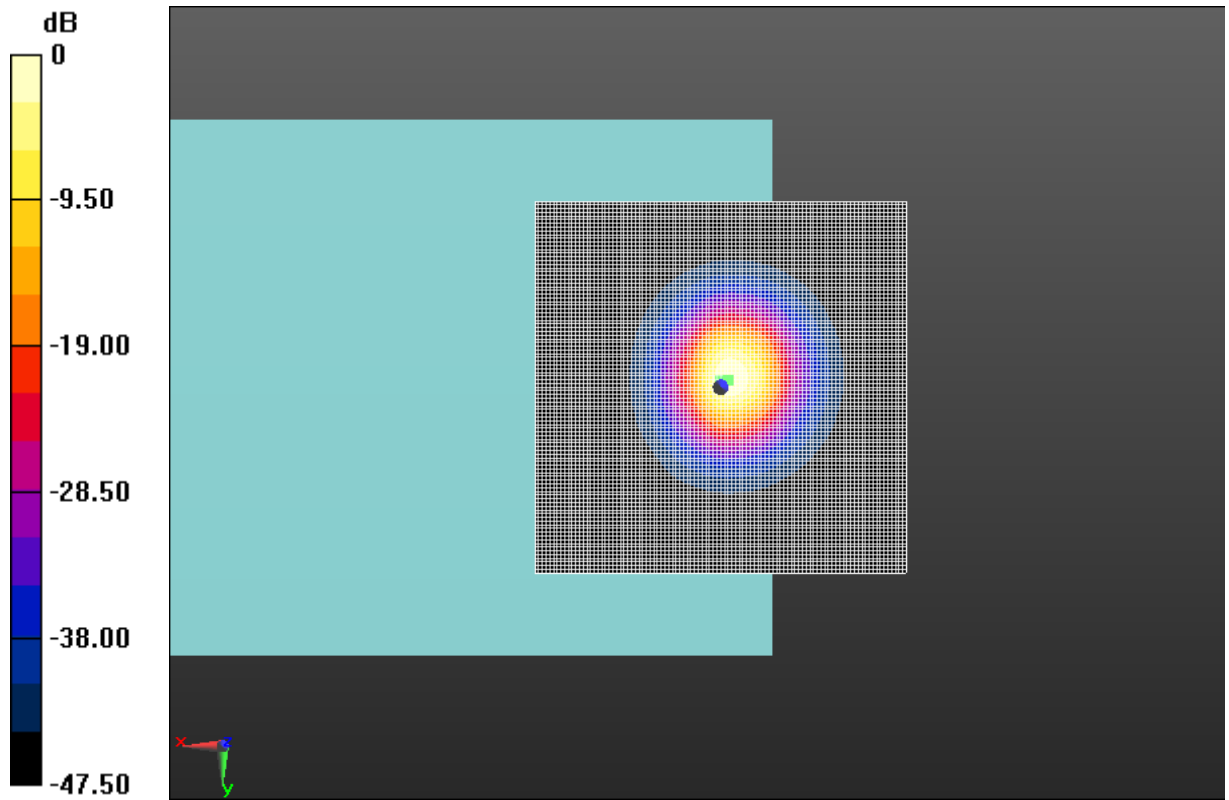
Cursor:

ABM1/ABM2 = 30.33 dB

ABM1 comp = 5.44 dBA/m

BWC Factor = 0.16 dB

Location: -1, -1, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.3 T-Coil GSM 1900

T-Coil GSM 1900 Transverse

Date: 2018-6-22

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: GSM Frequency: 1880 MHz Duty Cycle: 1:8.3

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 0.41 dBA/m

BWC Factor = 0.16 dB

Location: -1, -11, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

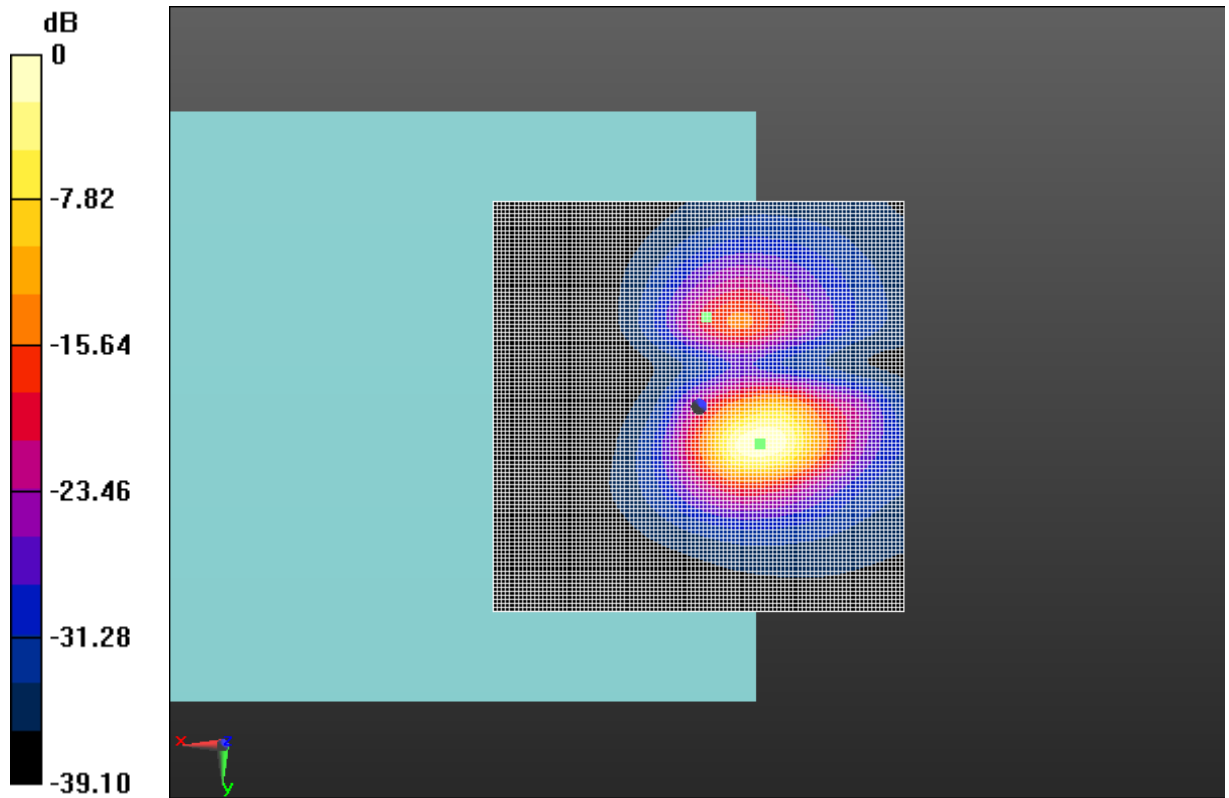
Cursor:

ABM1/ABM2 = 37.90 dB

ABM1 comp = -2.95 dBA/m

BWC Factor = 0.16 dB

Location: -7.5, 4.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.4 T-Coil GSM 1900

T-Coil WCDMA B2 Axial

Date: 2018-6-22

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: WCDMA Frequency: 1880 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 12.04 dBA/m

BWC Factor = 0.15 dB

Location: 5.5, -4.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

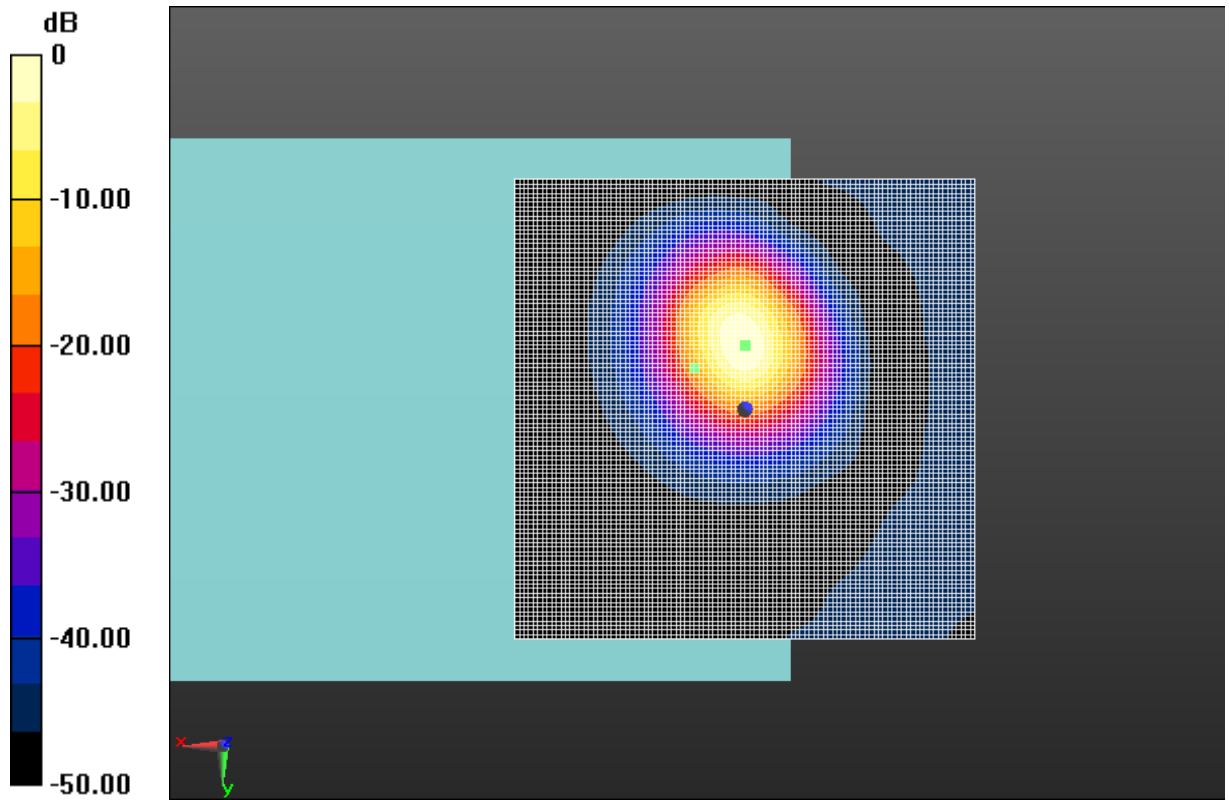
Cursor:

ABM1/ABM2 = 46.62 dB

ABM1 comp = 7.36 dBA/m

BWC Factor = 0.15 dB

Location: 0, -7, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.5 T-Coil WCDMA B2

T-Coil WCDMA B2 Transverse

Date: 2018-6-22

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: WCDMA Frequency: 1880 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 4.23 dBA/m

BWC Factor = 0.15 dB

Location: 5.5, 3.5, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

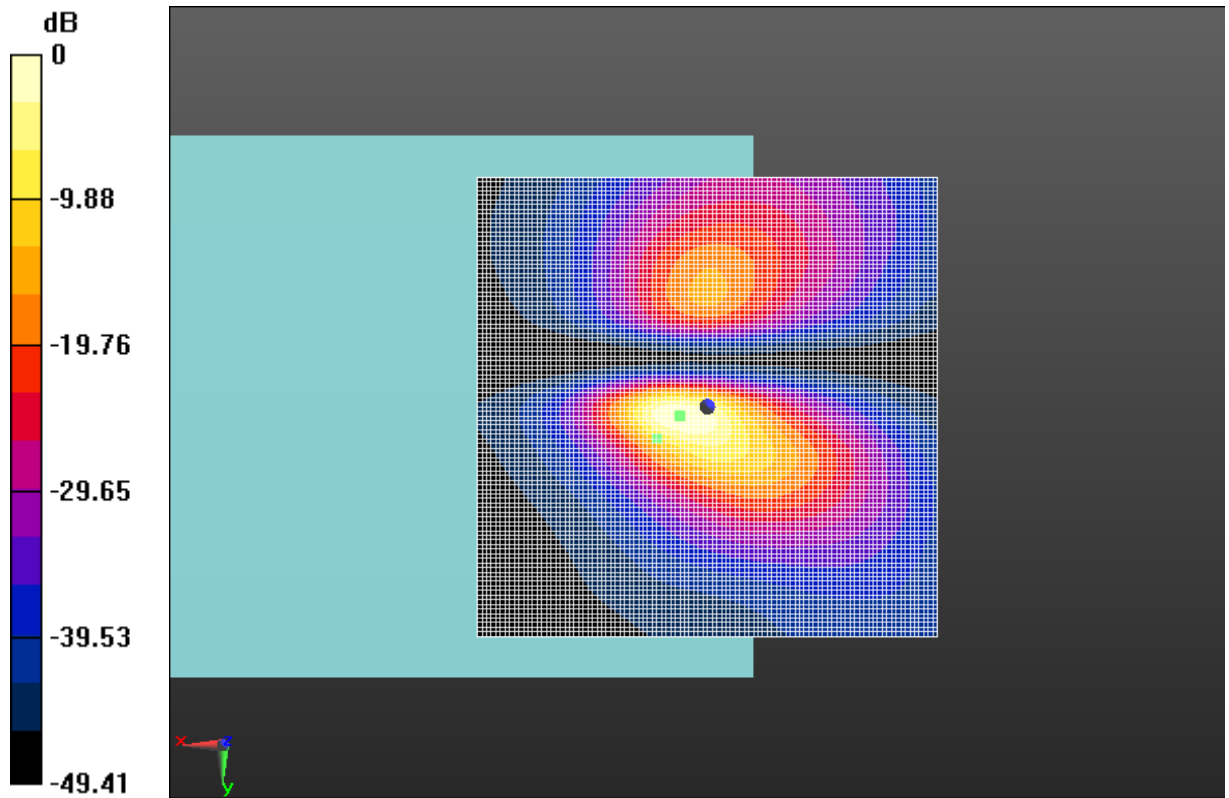
Cursor:

ABM1/ABM2 = 43.55 dB

ABM1 comp = 3.07 dBA/m

BWC Factor = 0.15 dB

Location: 3, 1, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.6 T-Coil WCDMA B2

T-Coil WCDMA B4 Axial

Date: 2018-6-22

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: WCDMA Frequency: 1732.6 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.01 dBA/m

BWC Factor = 0.16 dB

Location: 6, -5, 3.7 mm

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

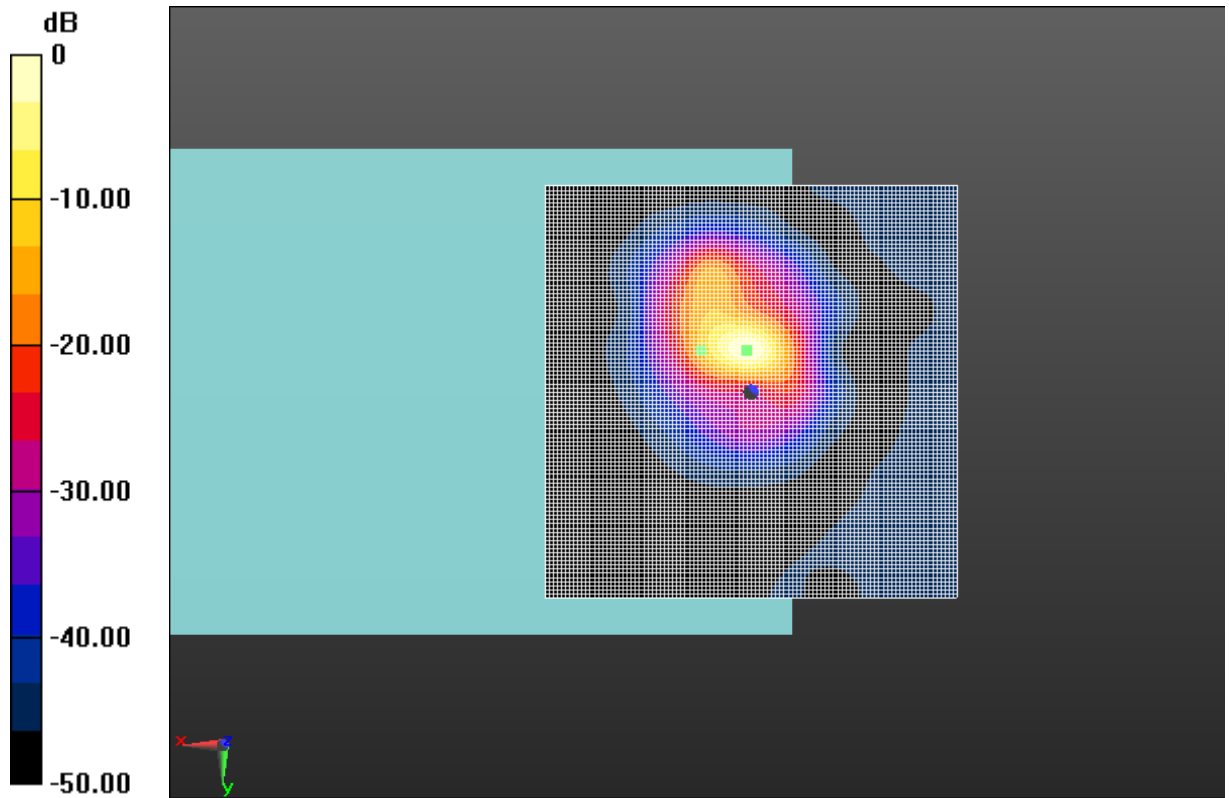
Cursor:

ABM1/ABM2 = 47.41 dB

ABM1 comp = 8.99 dBA/m

BWC Factor = 0.16 dB

Location: 0.5, -5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.7 T-Coil WCDMA B4

T-Coil WCDMA B4 Transverse

Date: 2018-6-22

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: WCDMA Frequency: 1732.6 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 5.22 dBA/m

BWC Factor = 0.16 dB

Location: 6, 2.5, 3.7 mm

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

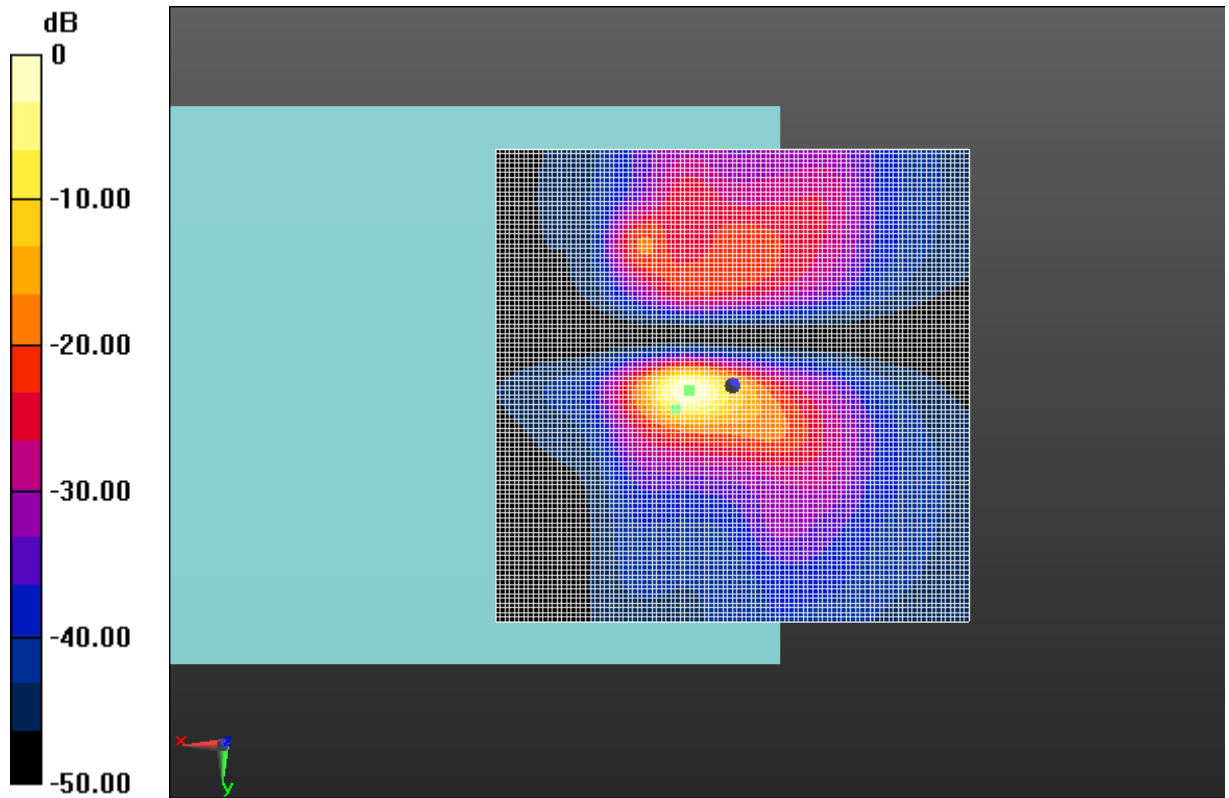
Cursor:

ABM1/ABM2 = 49.00 dB

ABM1 comp = 4.44 dBA/m

BWC Factor = 0.16 dB

Location: 4.5, 0.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.8 T-Coil WCDMA B4

T-Coil WCDMA B5 Axial

Date: 2018-6-22

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 836.4 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 12.46 dBA/m

BWC Factor = 0.15 dB

Location: 5.5, -5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

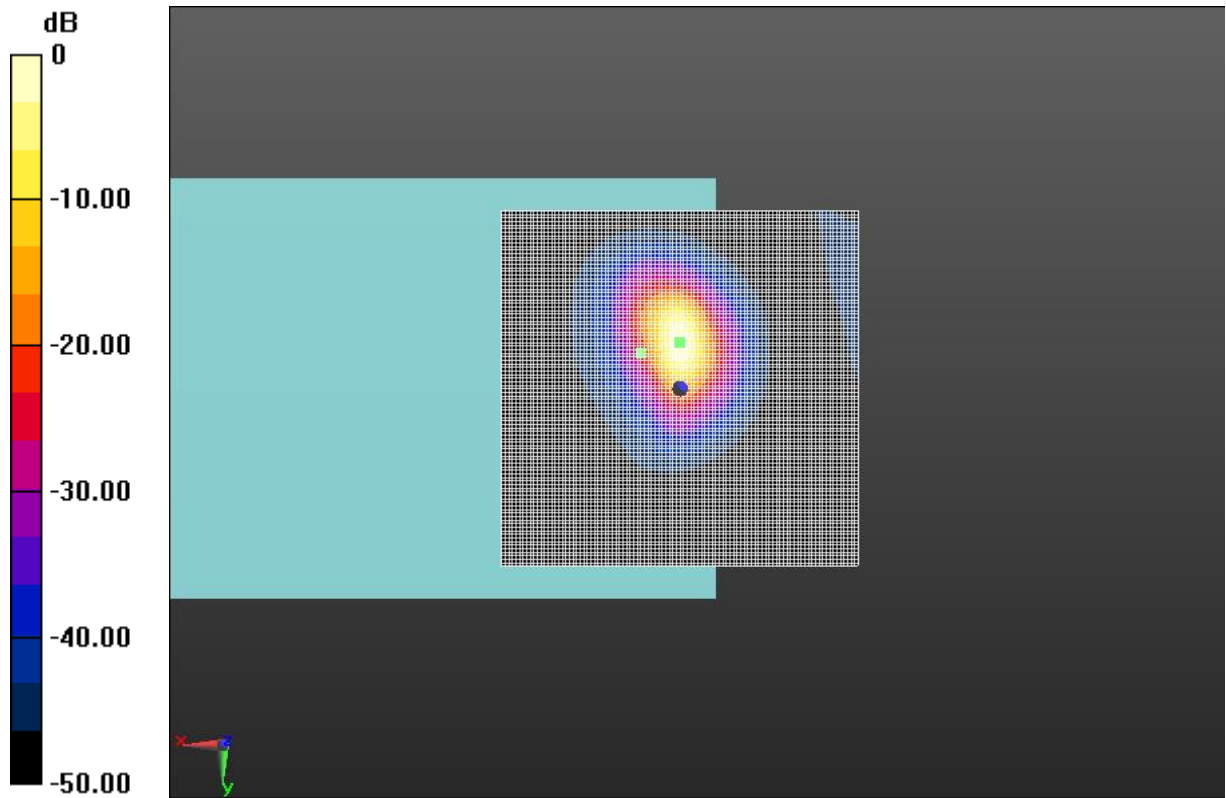
Cursor:

ABM1/ABM2 = 50.27 dB

ABM1 comp = 8.14 dBA/m

BWC Factor = 0.15 dB

Location: 0, -6.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.9 T-Coil WCDMA B5

T-Coil WCDMA B5 Transverse

Date: 2018-6-22

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 836.4 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 5.38 dBA/m

BWC Factor = 0.15 dB

Location: 5.5, 2, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

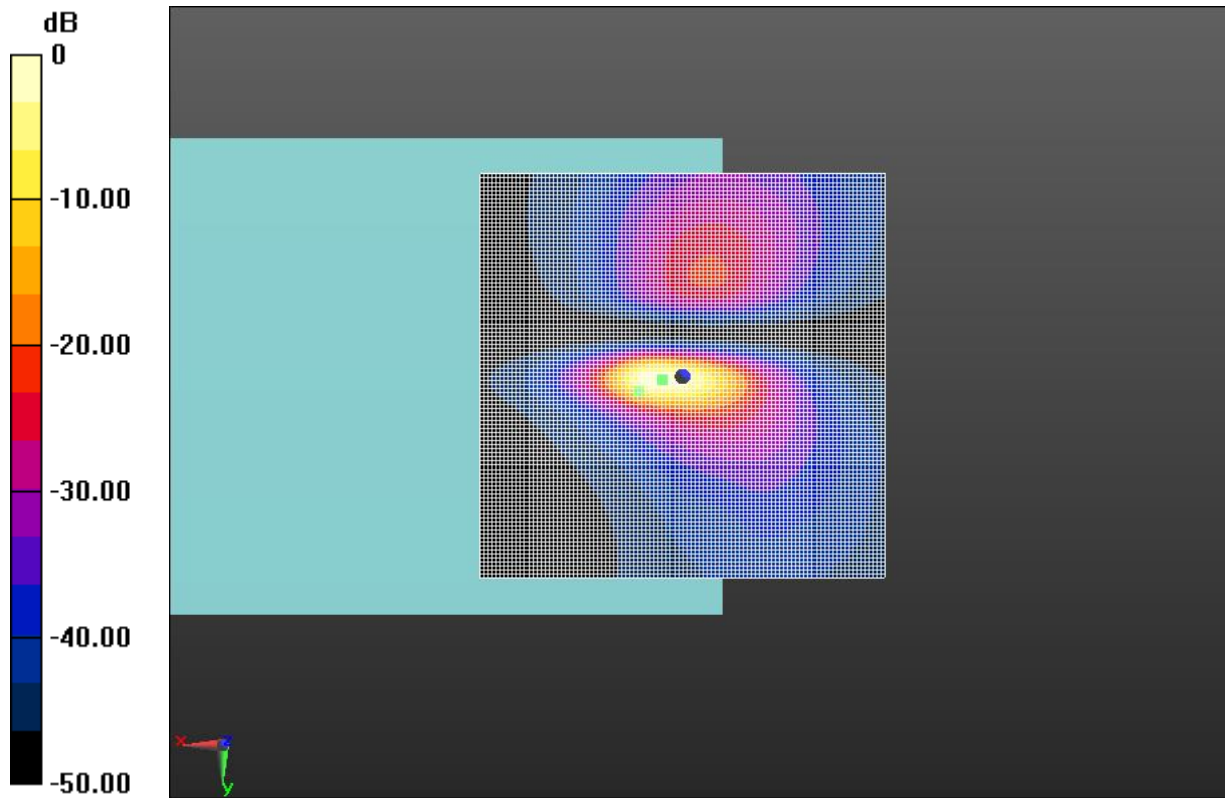
Cursor:

ABM1/ABM2 = 48.11 dB

ABM1 comp = 4.00 dBA/m

BWC Factor = 0.15 dB

Location: 2.5, 0.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.10 T-Coil WCDMA B5

T-Coil LTE-Band 2 Axial

Date: 2018-7-5

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 1880 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 22.67 dBA/m

BWC Factor = 0.15 dB

Location: 4.5, -0.5, 3.7 mm

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 51.33 dB

ABM1 comp = 20.12 dBA/m

BWC Factor = 0.15 dB

Location: -0.5, -0.5, 3.7 mm

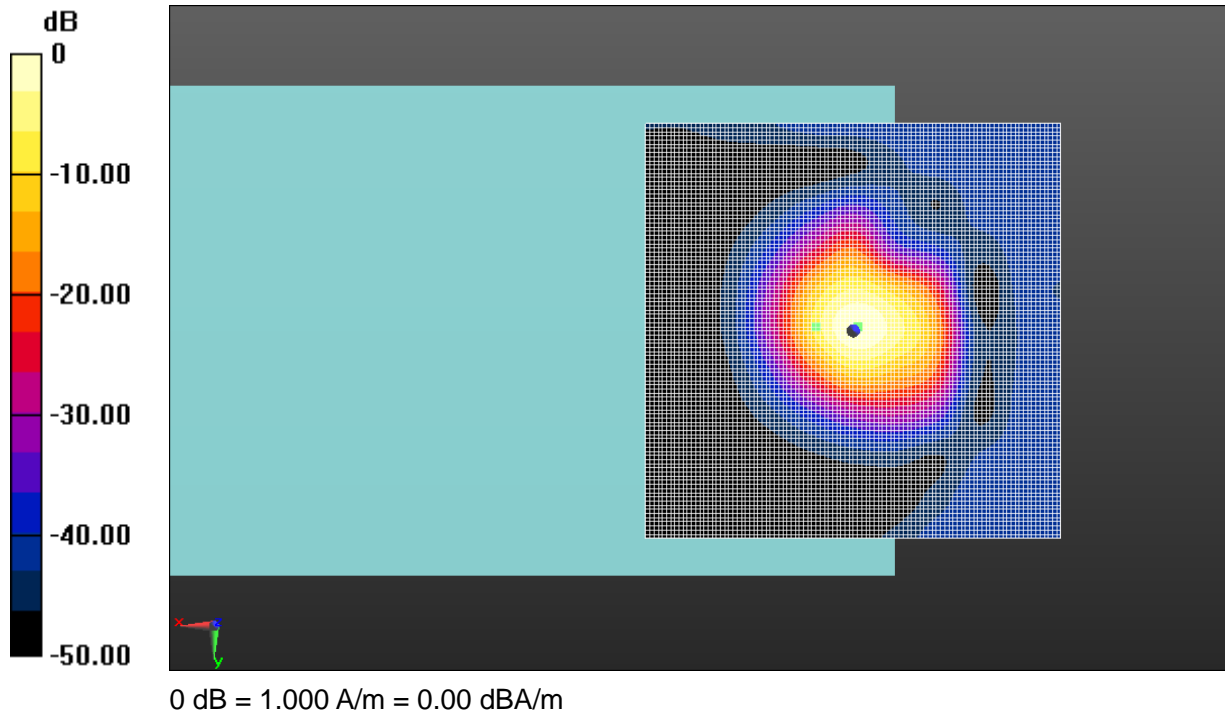


Fig A.11 T-Coil LTE-Band 2

T-Coil LTE-Band 2 Transverse

Date: 2018-7-5

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 1880 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 15.09 dBA/m

BWC Factor = 0.15 dB

Location: 1.5, -11, 3.7 mm

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 49.79 dB

ABM1 comp = 13.92 dBA/m

BWC Factor = 0.15 dB

Location: -2.5, -10.5, 3.7 mm

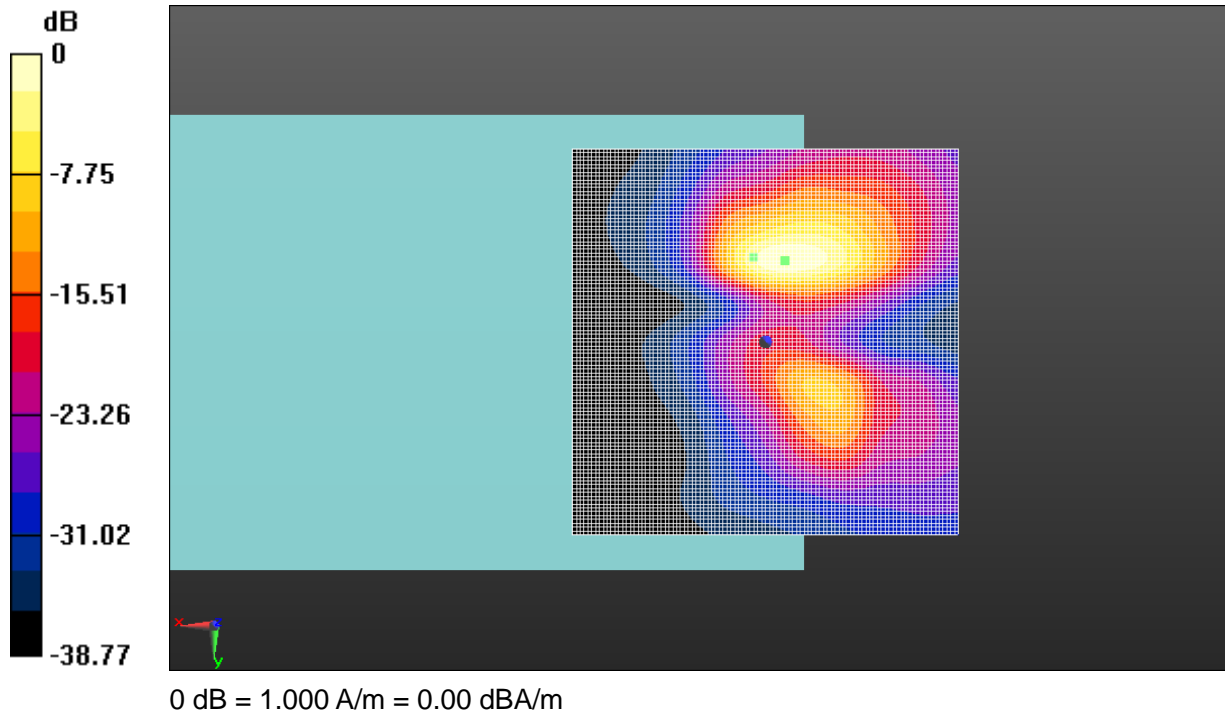


Fig A.12 T-Coil LTE-Band 2

T-Coil LTE-Band 4 Axial

Date: 2018-7-5

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 1732.5 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 21.53 dBA/m

BWC Factor = 0.15 dB

Location: 5, -4.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 50.28 dB

ABM1 comp = 18.57 dBA/m

BWC Factor = 0.15 dB

Location: -0.5, -3.5, 3.7 mm

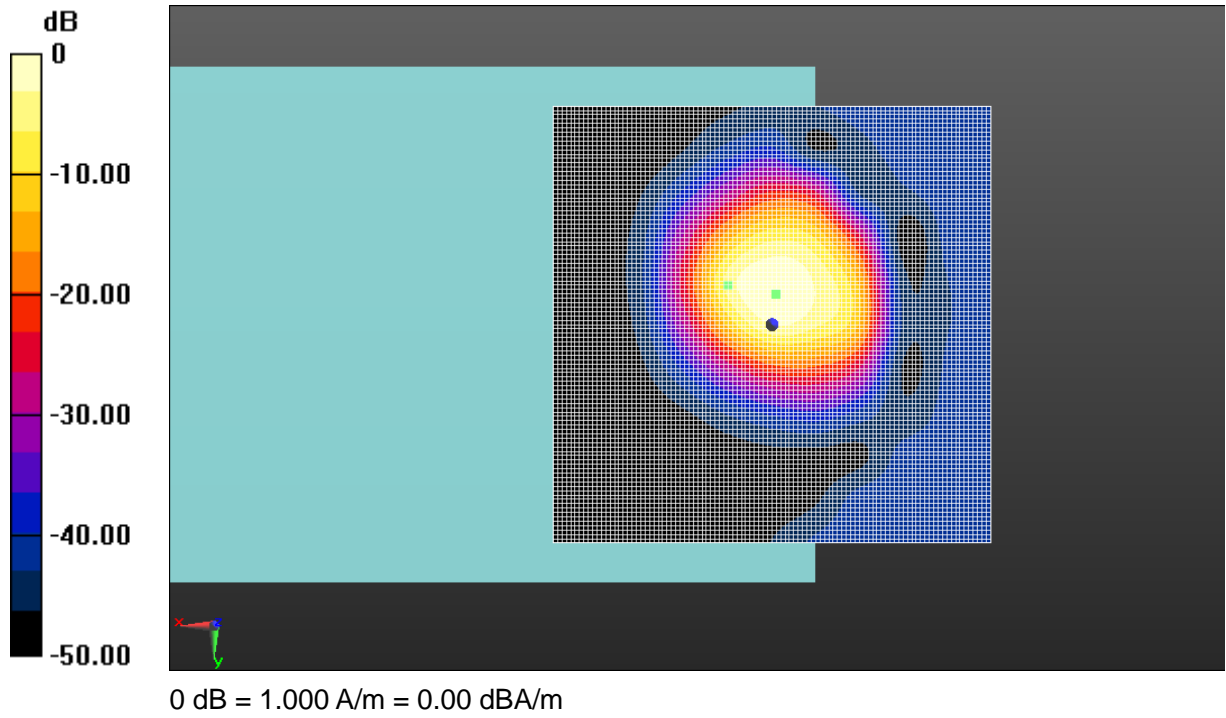


Fig A.13 T-Coil LTE-Band 4

T-Coil LTE-Band 4 Transverse

Date: 2018-7-5

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 1732.5 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.74 dBA/m

BWC Factor = 0.15 dB

Location: 5, -11.5, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 49.46 dB

ABM1 comp = 12.34 dBA/m

BWC Factor = 0.15 dB

Location: 0.5, -10.5, 3.7 mm

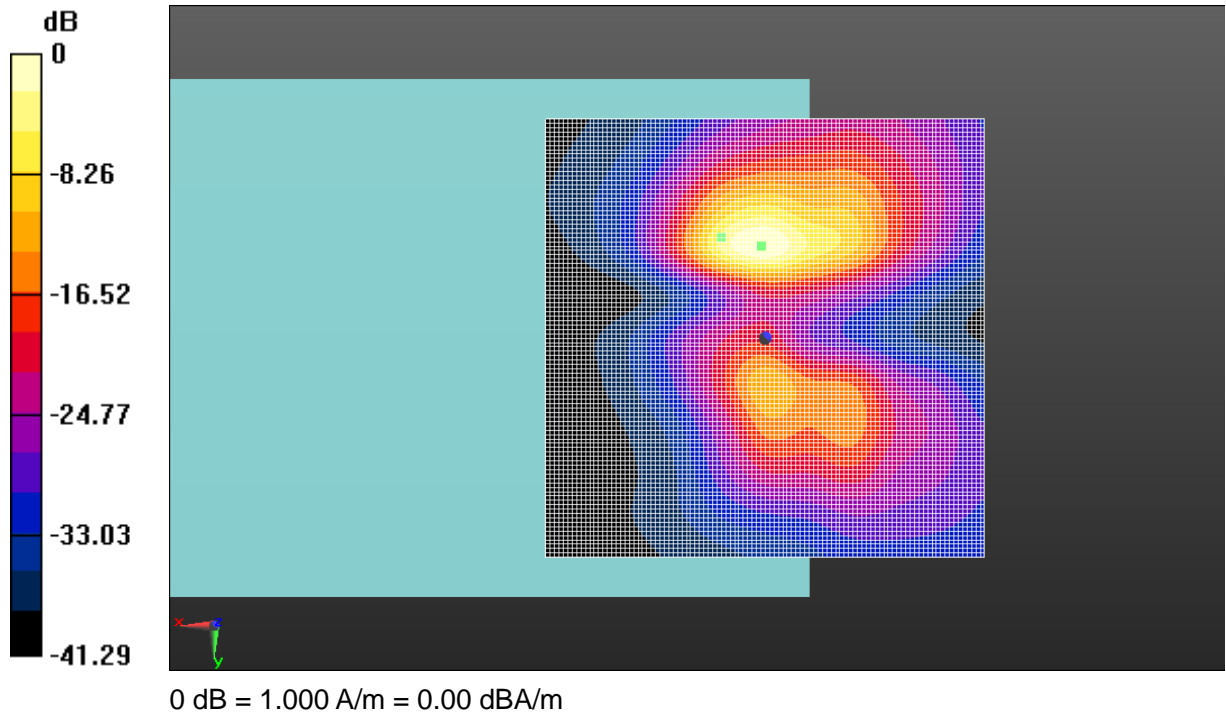


Fig A.14 T-Coil LTE-Band 4

T-Coil LTE-Band 5 Axial

Date: 2018-7-5

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 836.5 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 21.26 dBA/m

BWC Factor = 0.16 dB

Location: 5, -4.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 50.34 dB

ABM1 comp = 17.22 dBA/m

BWC Factor = 0.16 dB

Location: -1.5, -4, 3.7 mm

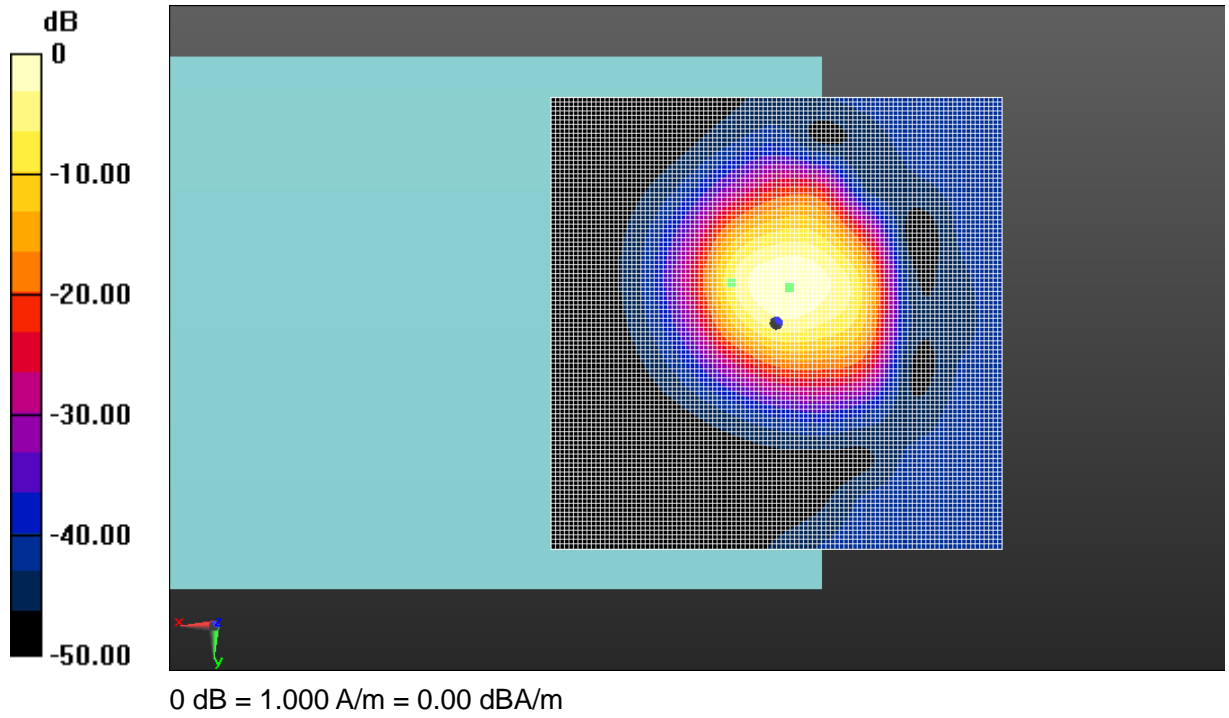


Fig A.15 T-Coil LTE-Band 5

T-Coil LTE-Band 5 Transverse

Date: 2018-7-5

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 836.5 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.68 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 48.83 dB

ABM1 comp = 12.59 dBA/m

BWC Factor = 0.16 dB

Location: 1.5, -10.5, 3.7 mm

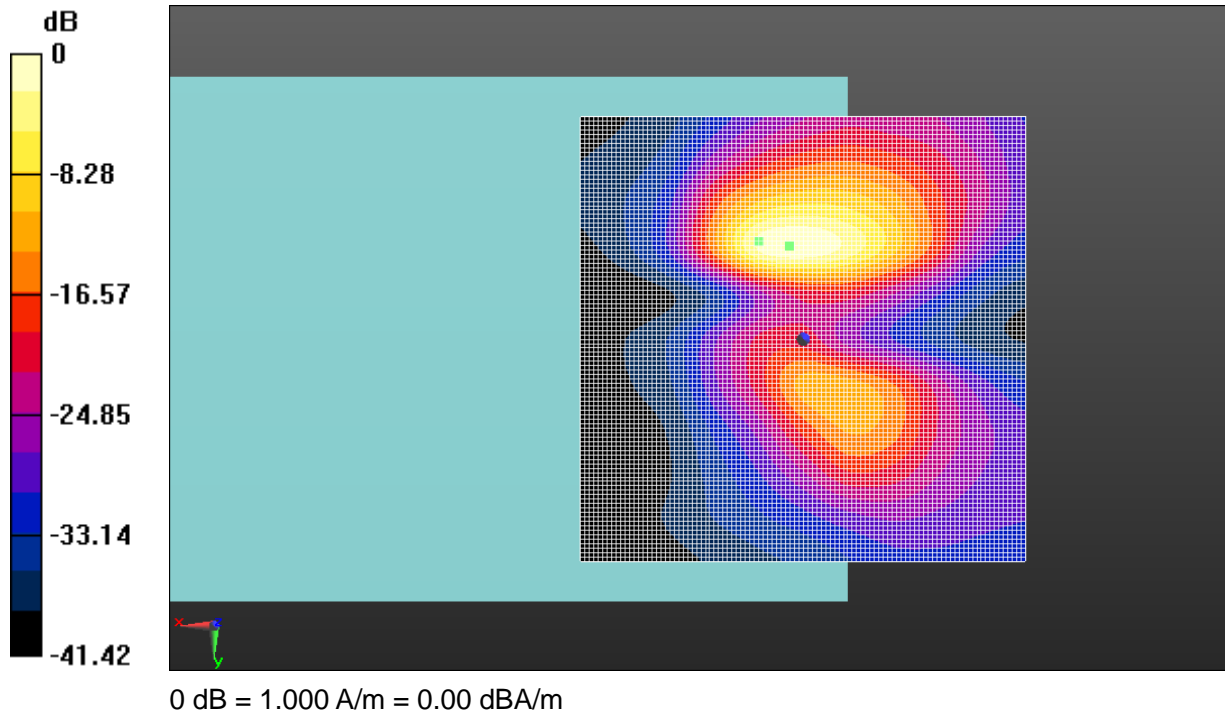


Fig A.16 T-Coil LTE-Band 5

T-Coil LTE-Band 7 Axial

Date: 2018-7-5

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 2535 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 20.95 dBA/m

BWC Factor = 0.15 dB

Location: 5, -4.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 50.44 dB

ABM1 comp = 17.23 dBA/m

BWC Factor = 0.15 dB

Location: -1.5, -3, 3.7 mm

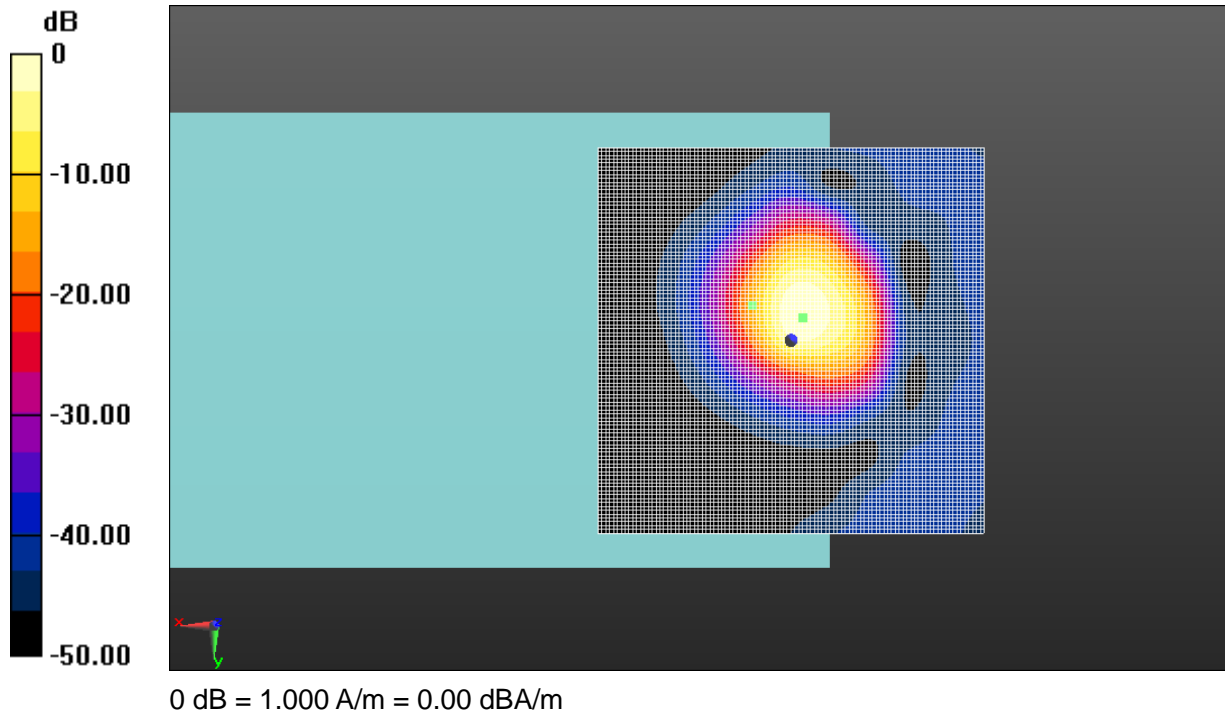


Fig A.17 T-Coil LTE-Band 7

T-Coil LTE-Band 7 Transverse

Date: 2018-7-5

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 2535 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.33 dBA/m

BWC Factor = 0.15 dB

Location: 5, -11, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.15 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 48.84 dB

ABM1 comp = 11.39 dBA/m

BWC Factor = 0.15 dB

Location: -0.5, -11, 3.7 mm

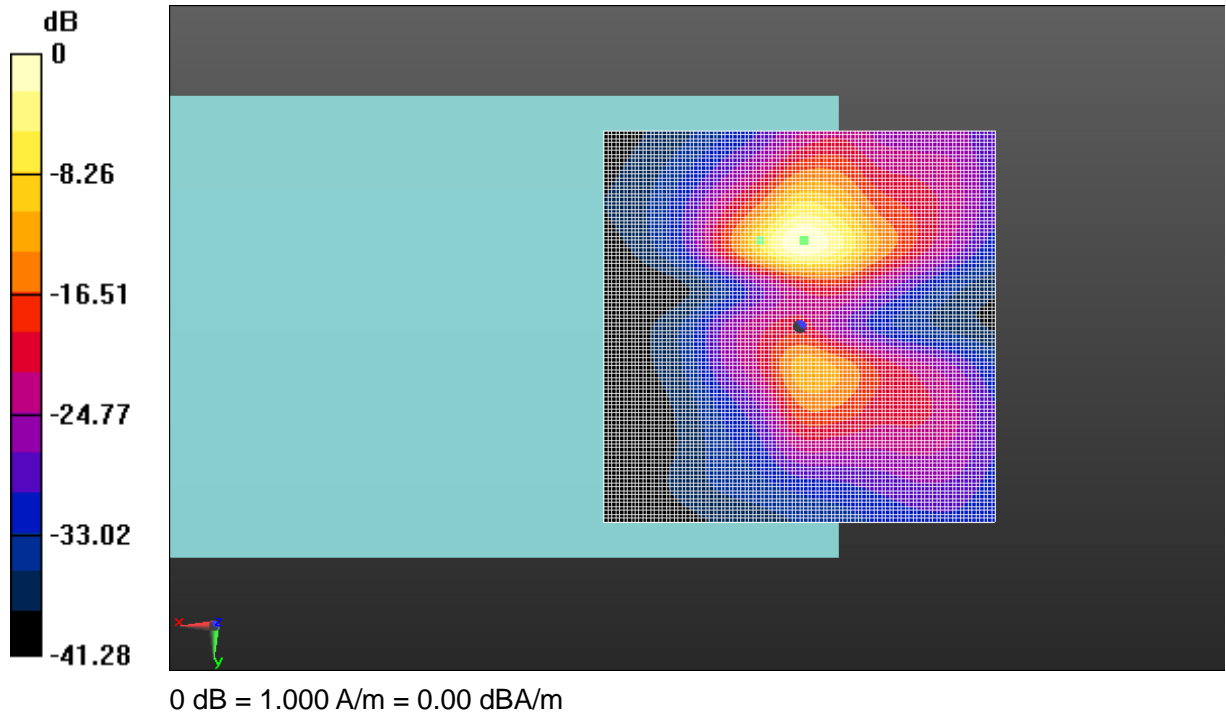


Fig A.18 T-Coil LTE-Band 7

T-Coil LTE-Band 12 Axial

Date: 2018-7-6

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 707.5 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 21.36 dBA/m

BWC Factor = 0.16 dB

Location: 5, -5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 51.03 dB

ABM1 comp = 18.96 dBA/m

BWC Factor = 0.16 dB

Location: 0, -5.5, 3.7 mm

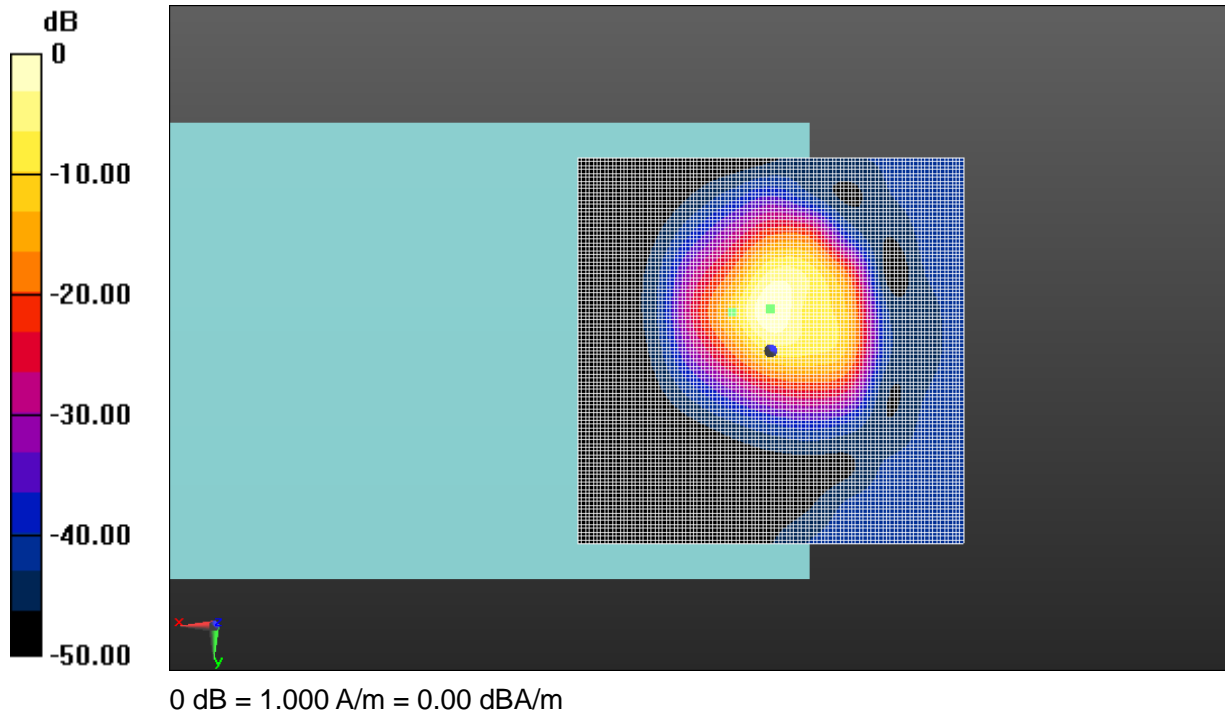


Fig A.19 T-Coil LTE-Band 12

T-Coil LTE-Band 12 Transverse

Date: 2018-7-6

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 707.5 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.62 dBA/m

BWC Factor = 0.16 dB

Location: 5, -12, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 49.38 dB

ABM1 comp = 12.96 dBA/m

BWC Factor = 0.16 dB

Location: 2, -11, 3.7 mm

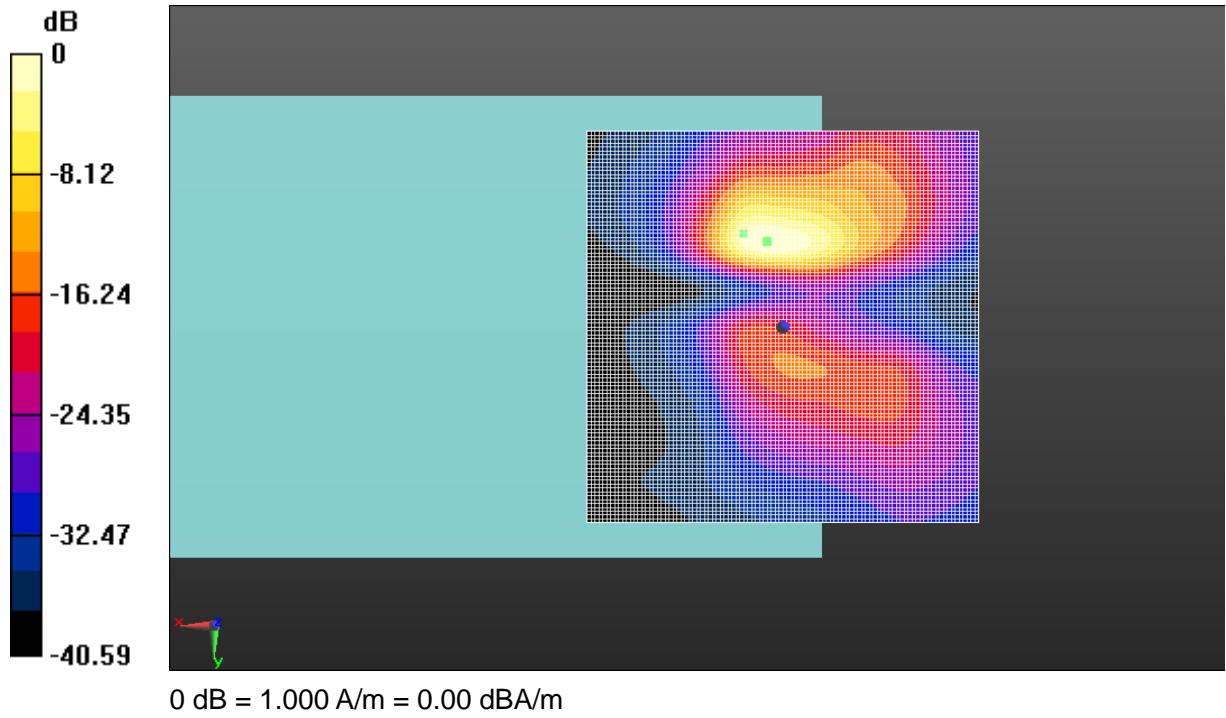


Fig A.20 T-Coil LTE-Band 13

T-Coil LTE-Band 13 Axial

Date: 2018-7-6

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 782 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 21.31 dBA/m

BWC Factor = 0.16 dB

Location: 5, -5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 50.53 dB

ABM1 comp = 14.71 dBA/m

BWC Factor = 0.16 dB

Location: -3.5, -4.5, 3.7 mm

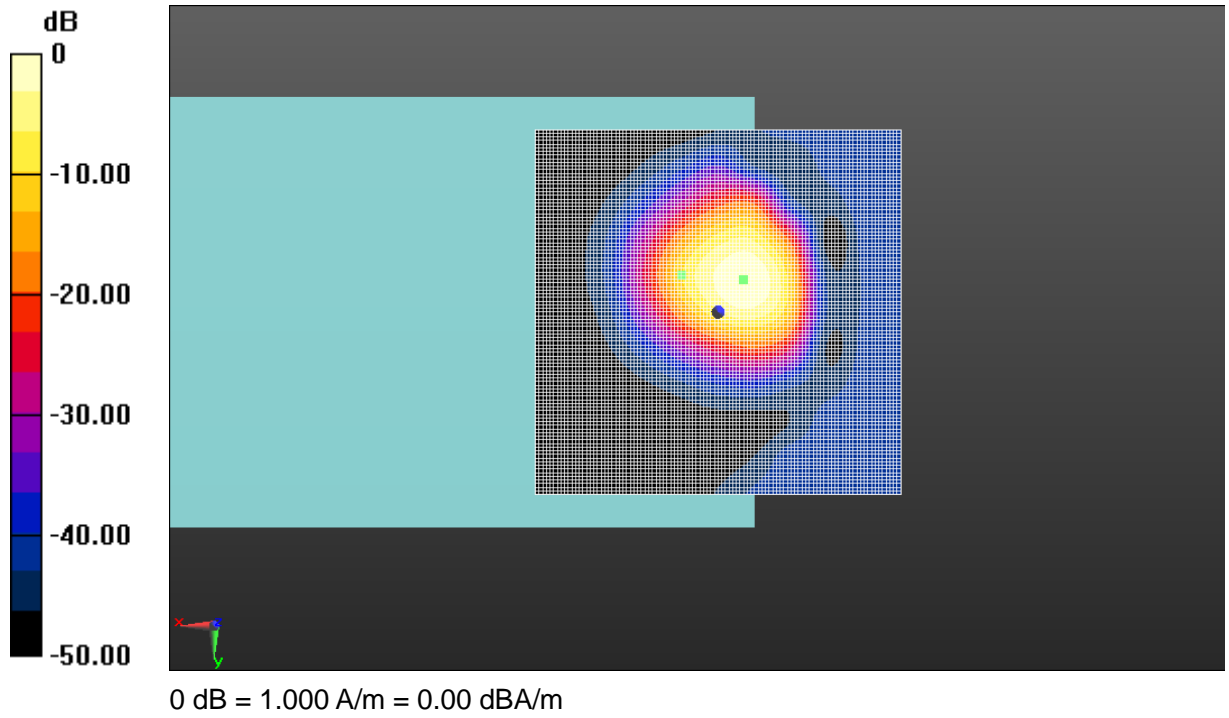


Fig A.21 T-Coil LTE-Band 13

T-Coil LTE-Band 13 Transverse

Date: 2018-7-6

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 782 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.59 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11.5, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 49.49 dB

ABM1 comp = 11.92 dBA/m

BWC Factor = 0.16 dB

Location: 0, -11, 3.7 mm

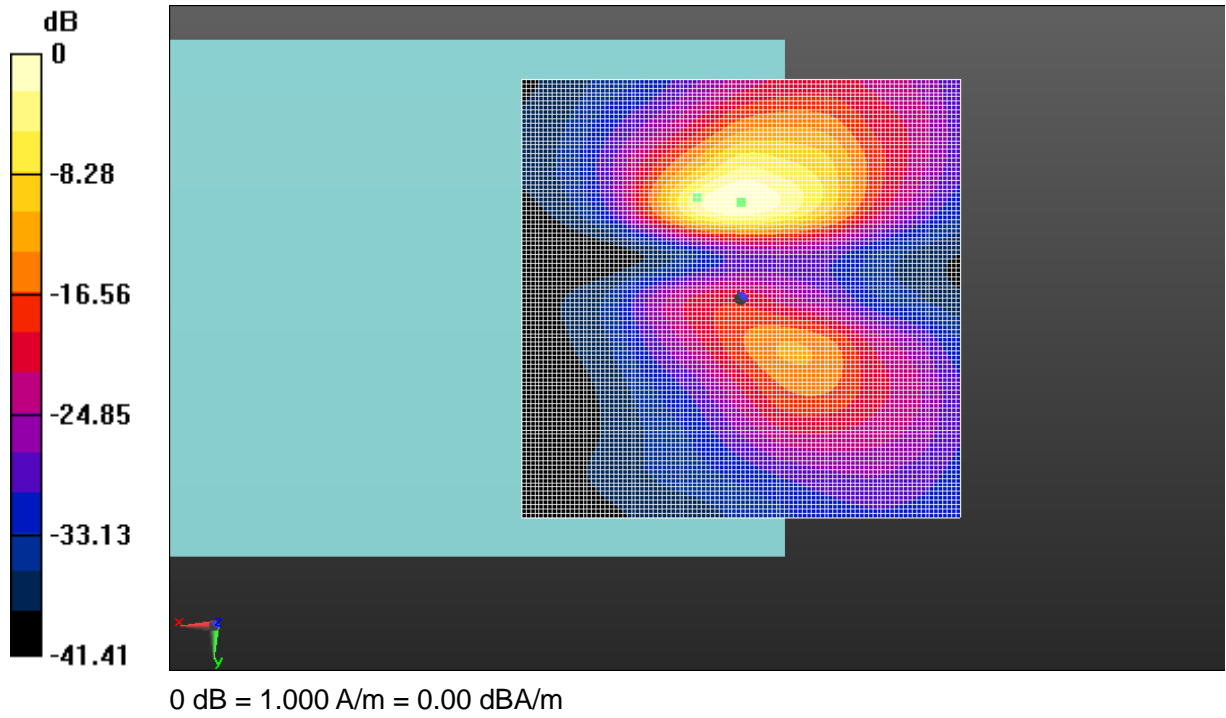


Fig A.22 T-Coil LTE-Band 13

T-Coil LTE-Band 25 Axial

Date: 2018-7-6

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 1882.5 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 21.23 dBA/m

BWC Factor = 0.16 dB

Location: 5, -5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 50.75 dB

ABM1 comp = 17.18 dBA/m

BWC Factor = 0.16 dB

Location: -1.5, -5, 3.7 mm

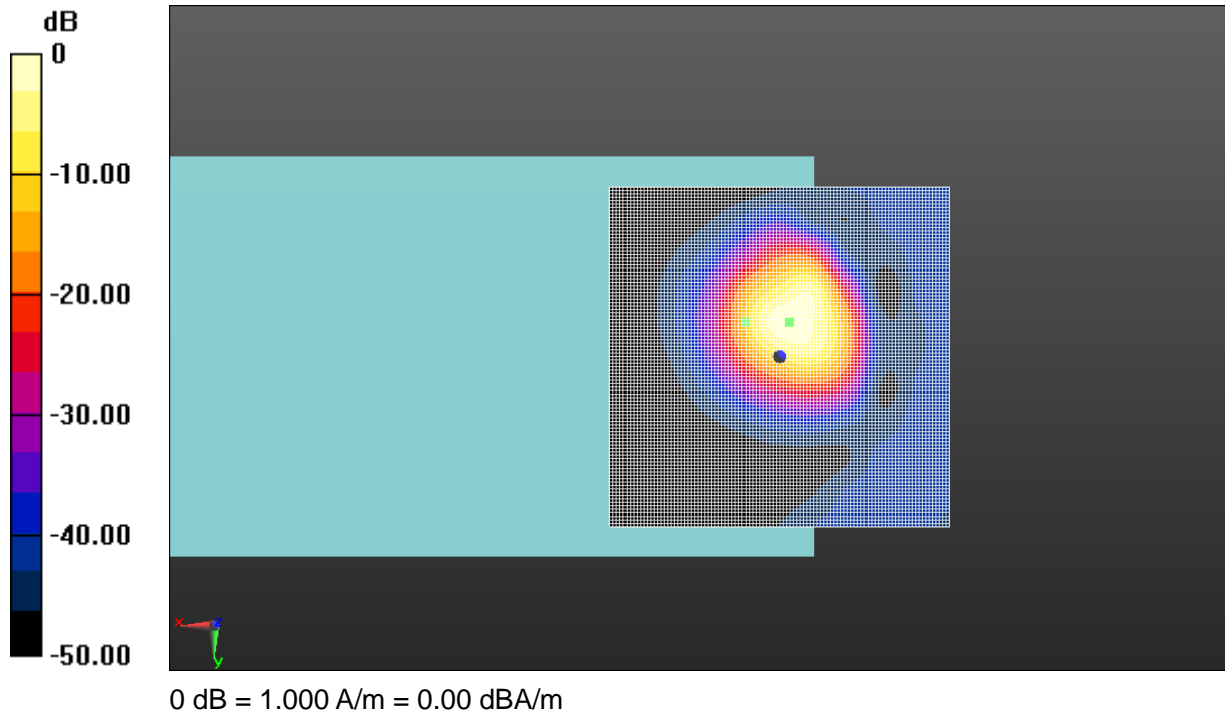


Fig A.23 T-Coil LTE-Band 25

T-Coil LTE-Band 25 Transverse

Date: 2018-7-6

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 1882.5 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.57 dBA/m

BWC Factor = 0.16 dB

Location: 5, -12, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 49.21 dB

ABM1 comp = 13.39 dBA/m

BWC Factor = 0.16 dB

Location: 4, -11.5, 3.7 mm

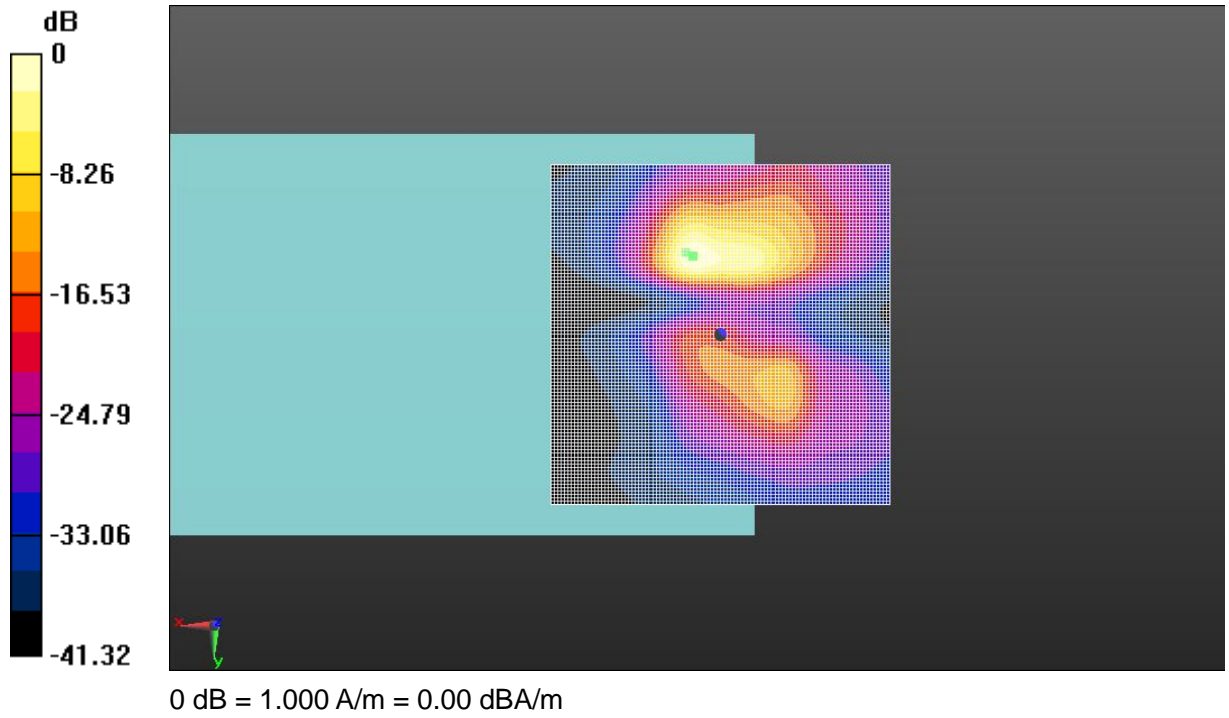


Fig A.24 T-Coil LTE-Band 25

T-Coil LTE-Band 26 Axial

Date: 2018-7-6

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 831.5 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 21.12 dBA/m

BWC Factor = 0.16 dB

Location: 5, -5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 50.05 dB

ABM1 comp = 18.19 dBA/m

BWC Factor = 0.16 dB

Location: -0.5, -4.5, 3.7 mm

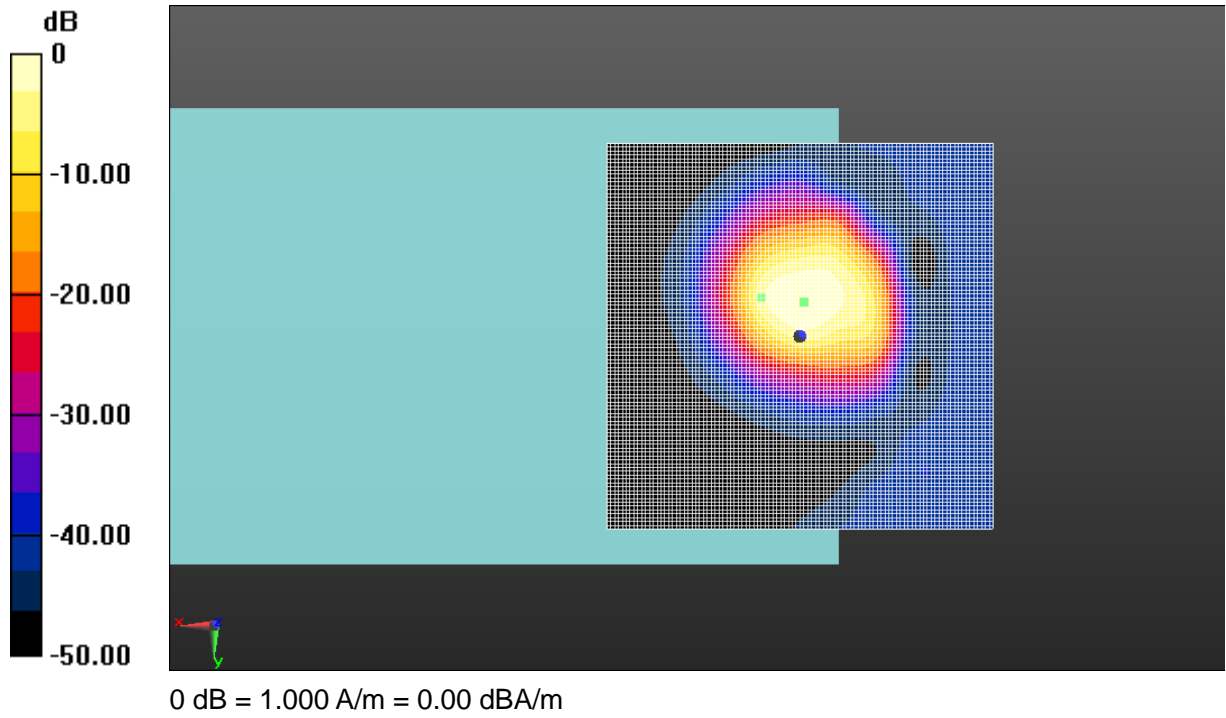


Fig A.25 T-Coil LTE-Band 26

T-Coil LTE-Band 26 Transverse

Date: 2018-7-6

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 831.5 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.38 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11.5, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 49.16 dB

ABM1 comp = 11.63 dBA/m

BWC Factor = 0.16 dB

Location: 0, -11, 3.7 mm

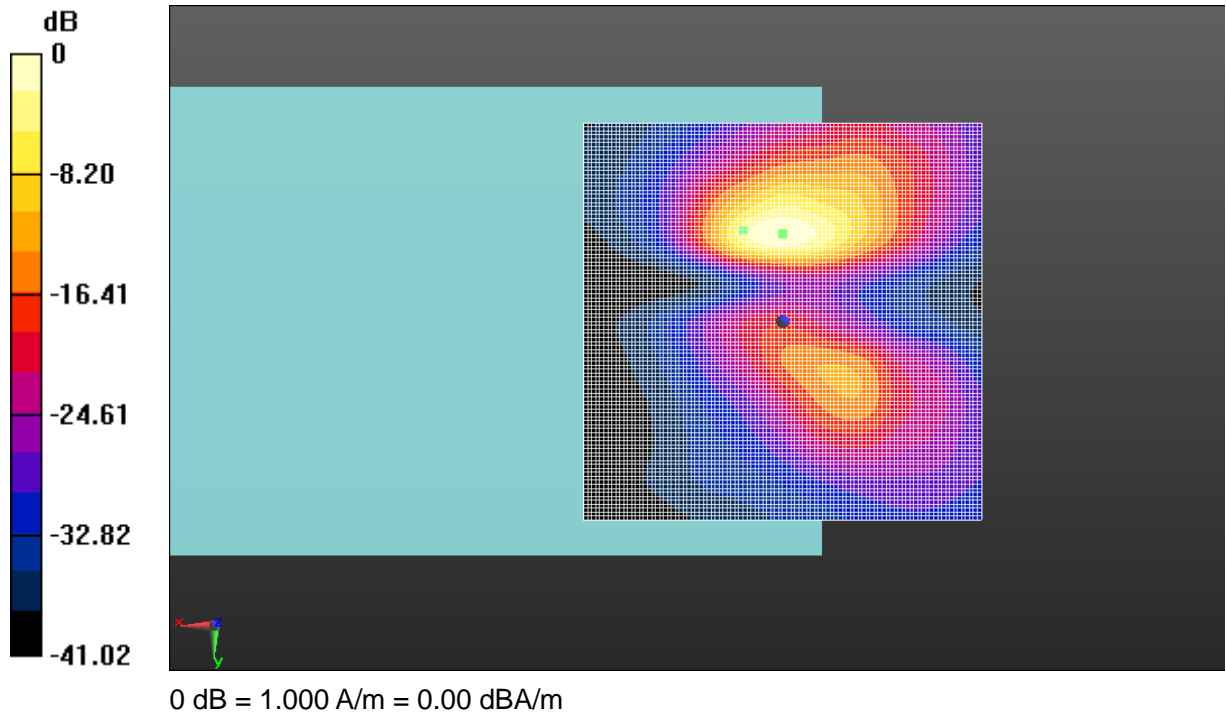


Fig A.26 T-Coil LTE-Band 26

T-Coil LTE-Band 38 Axial

Date: 2018-7-6

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 2595 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 20.43 dBA/m

BWC Factor = 0.16 dB

Location: 5, -4.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

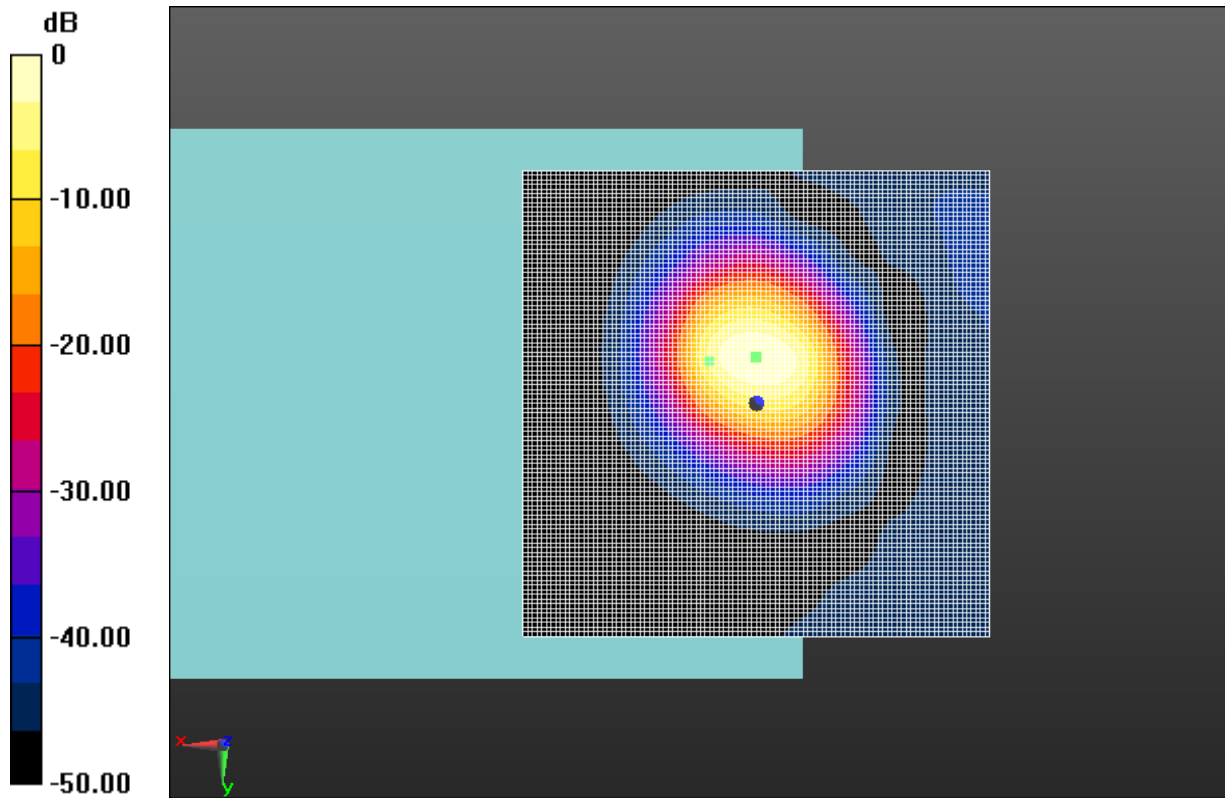
Cursor:

ABM1/ABM2 = 45.19 dB

ABM1 comp = 17.91 dBA/m

BWC Factor = 0.16 dB

Location: 0, -5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.27 T-Coil LTE-Band 38

T-Coil LTE-Band 38 Transverse

Date: 2018-7-6

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 2595 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 12.71 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

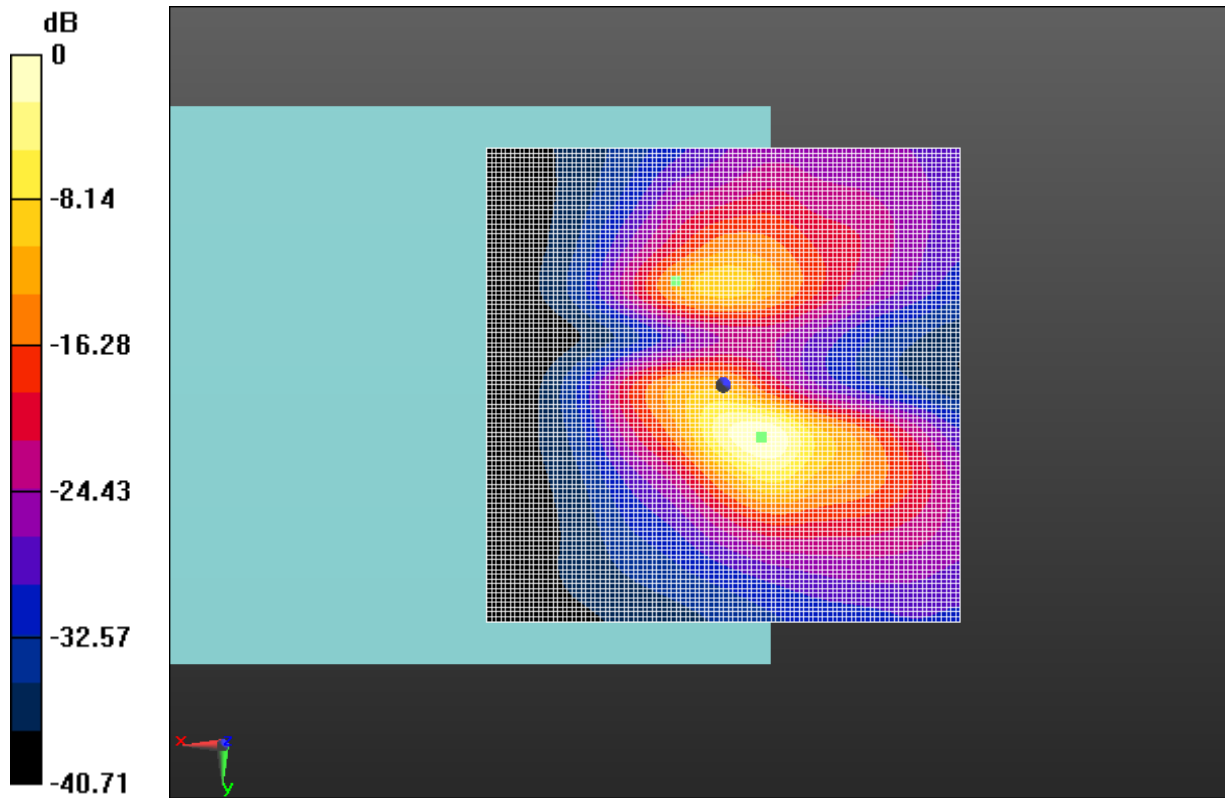
Cursor:

ABM1/ABM2 = 45.19 dB

ABM1 comp = 8.05 dBA/m

BWC Factor = 0.16 dB

Location: -4, 5.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.28 T-Coil LTE-Band 38

T-Coil LTE-Band 66 Axial

Date: 2018-7-6

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 1745 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 20.74 dBA/m

BWC Factor = 0.16 dB

Location: 5, -4.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

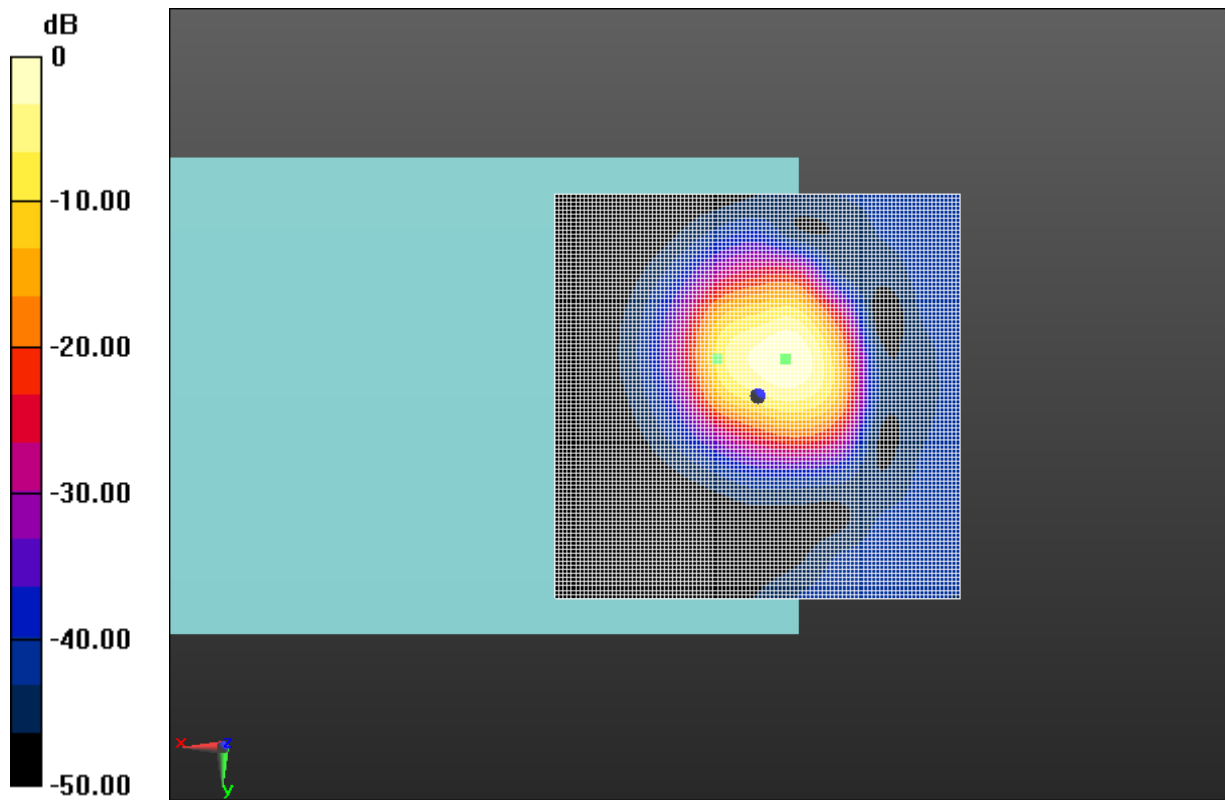
Cursor:

ABM1/ABM2 = 50.09 dB

ABM1 comp = 14.27 dBA/m

BWC Factor = 0.16 dB

Location: -3.5, -4.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.29 T-Coil LTE-Band 66

T-Coil LTE-Band 66 Transverse

Date: 2018-7-6

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 1745 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.08 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11.5, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

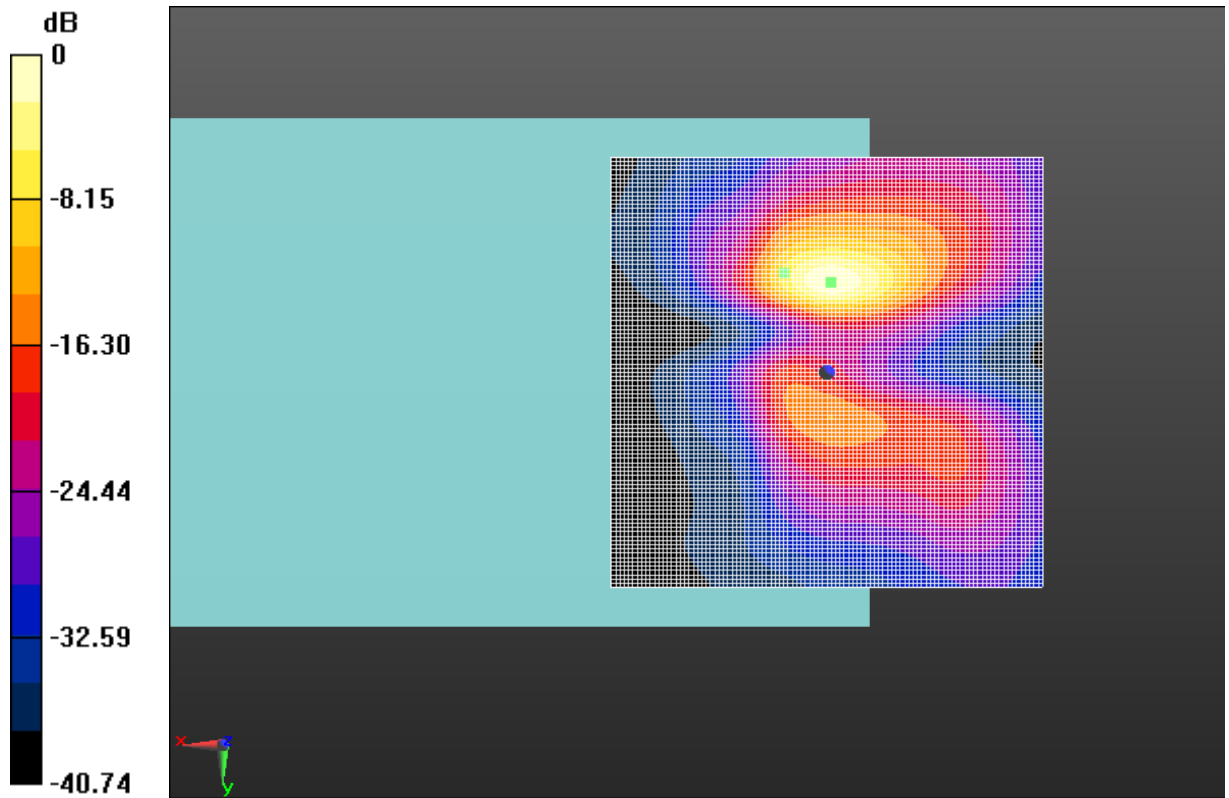
Cursor:

ABM1/ABM2 = 48.45 dB

ABM1 comp = 11.09 dBA/m

BWC Factor = 0.16 dB

Location: -0.5, -10.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.30 T-Coil LTE-Band 66

T-Coil WIFI 2.4G (Main antenna) Axial

Date: 2018-7-9

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 2437 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 20.87 dBA/m

BWC Factor = 0.16 dB

Location: 5, -4.5, 3.7 mm

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

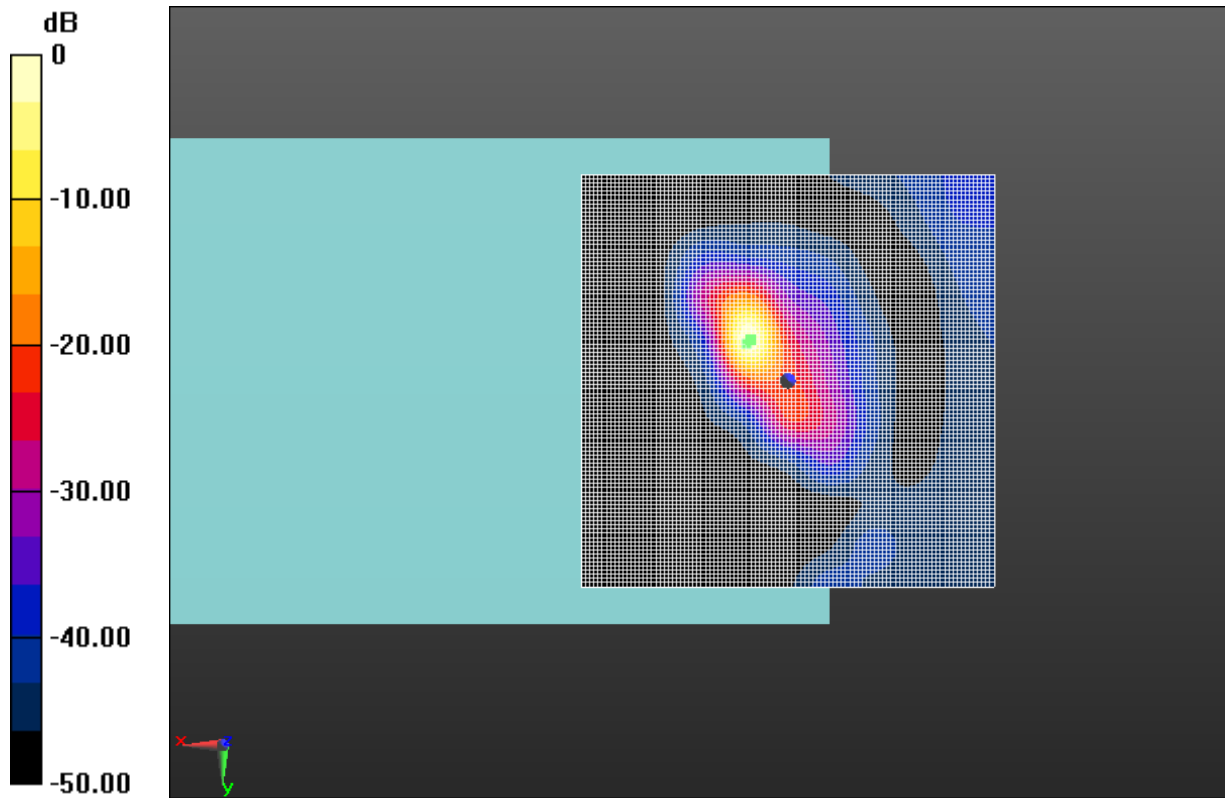
Cursor:

ABM1/ABM2 = 50.17 dB

ABM1 comp = 20.82 dBA/m

BWC Factor = 0.16 dB

Location: 4.5, -5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.31 T-Coil WIFI 2.4G

T-Coil WIFI 2.4G (Main antenna) Transverse

Date: 2018-7-9

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 2437MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 14.95 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11.5, 3.7 mm

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

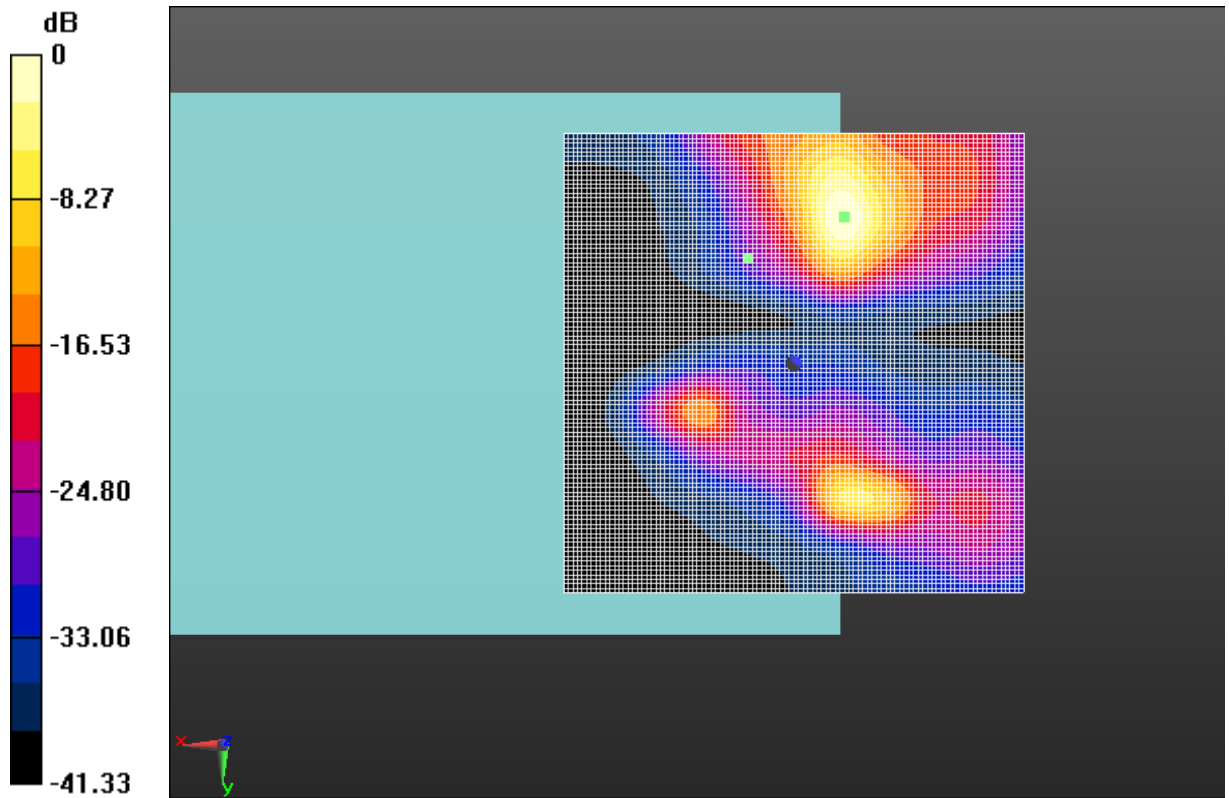
Cursor:

ABM1/ABM2 = 48.25 dB

ABM1 comp = 8.19 dBA/m

BWC Factor = 0.16 dB

Location: -5.5, -16, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.32 T-Coil WIFI 2.4G

T-Coil WIFI 5.2G (Main antenna) Axial

Date: 2018-7-9

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5200 MHz Duty Cycle: 1:1

Probe: AM1DV3 – 3086

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 22.43 dBA/m

BWC Factor = 0.16 dB

Location: 5, -4.5, 3.7 mm

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

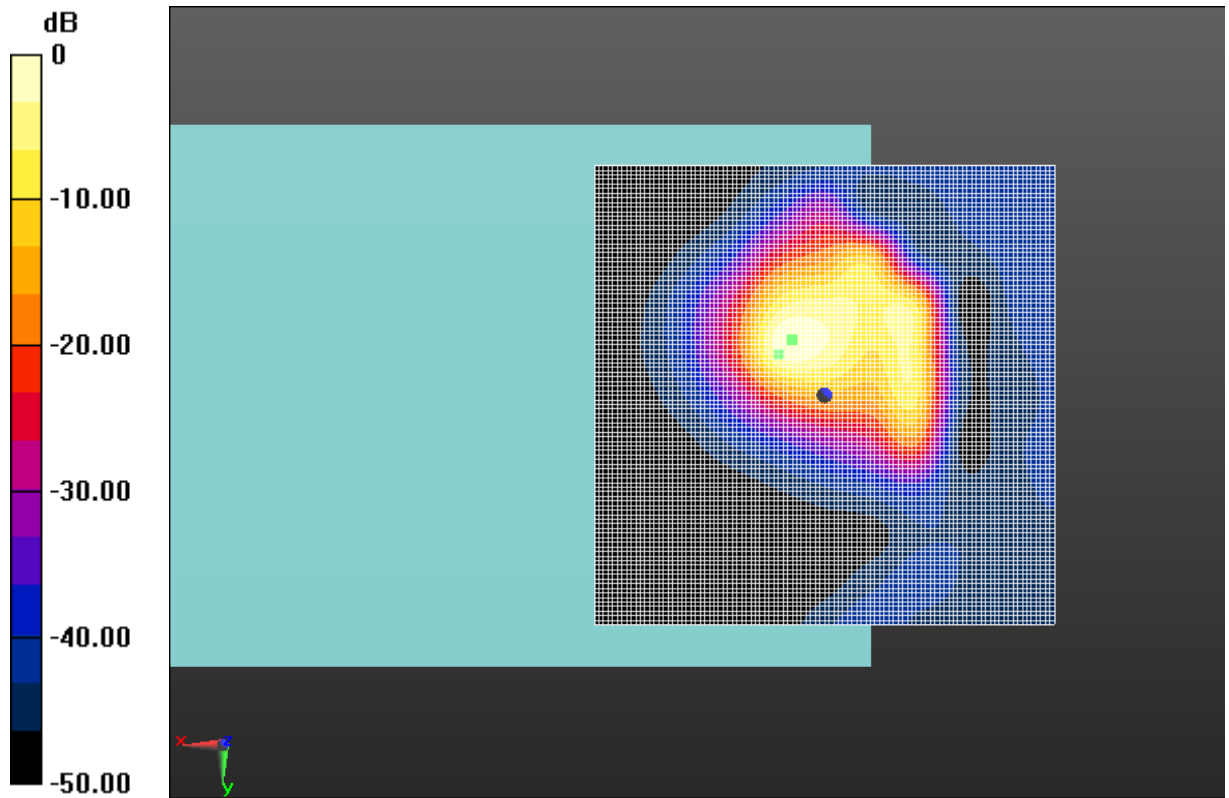
Cursor:

ABM1/ABM2 = 48.25 dB

ABM1 comp = 21.84 dBA/m

BWC Factor = 0.16 dB

Location: 3.5, -6, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.33 T-Coil WIFI 5.2G

T-Coil WIFI 5.2G (Main antenna) Transverse

Date: 2018-7-9

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5200 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 15.35 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11.5, 3.7 mm

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

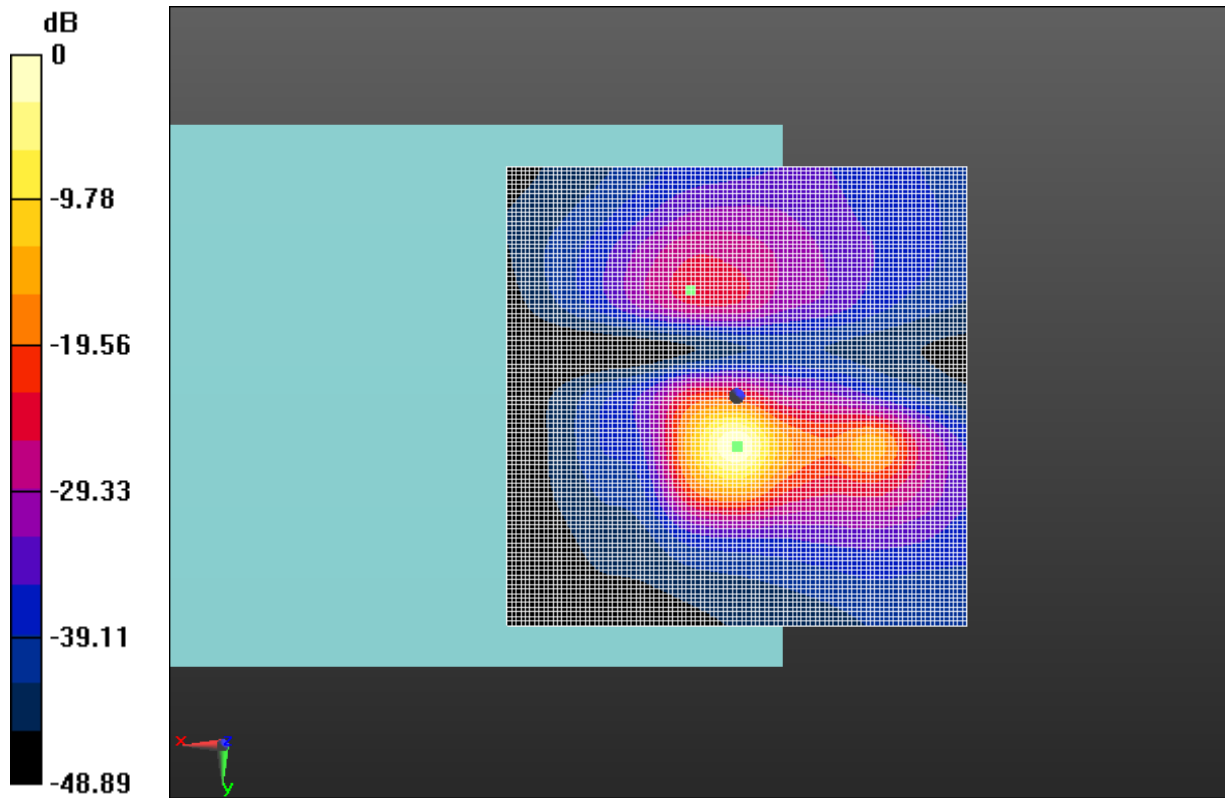
Cursor:

ABM1/ABM2 = 50.44 dB

ABM1 comp = 13.30 dBA/m

BWC Factor = 0.16 dB

Location: 0, 5.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.34 T-Coil WIFI 5.2G

T-Coil WIFI 5.3G (Main antenna) Axial

Date: 2018-7-9

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5300 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 21.73 dBA/m

BWC Factor = 0.16 dB

Location: 4.5, -4.5, 3.7 mm

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

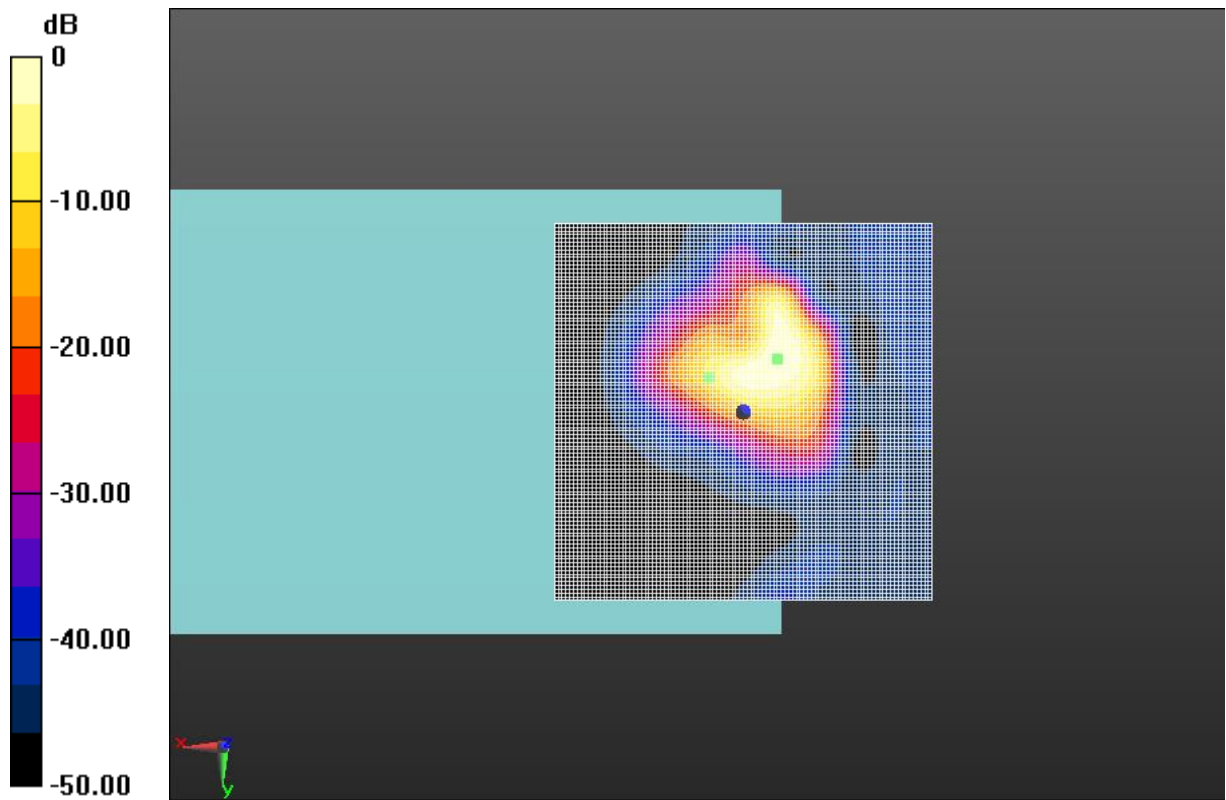
Cursor:

ABM1/ABM2 = 48.11 dB

ABM1 comp = 13.07 dBA/m

BWC Factor = 0.16 dB

Location: -4.5, -7, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.35 T-Coil WIFI 5.3G

T-Coil WIFI 5.3G (Main antenna) Transverse

Date: 2018-7-9

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5300 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 14.54 dBA/m

BWC Factor = 0.16 dB

Location: 4.5, -11.5, 3.7 mm

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

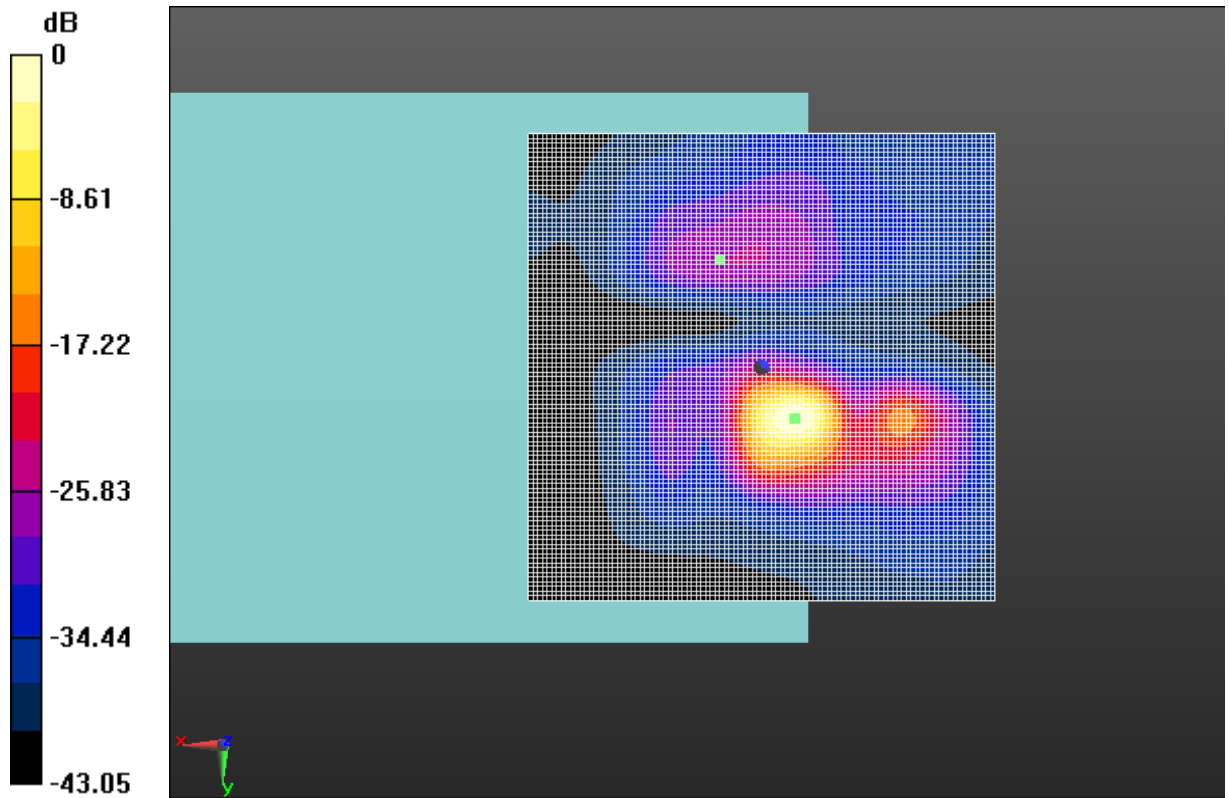
Cursor:

ABM1/ABM2 = 52.32 dB

ABM1 comp = 10.69 dBA/m

BWC Factor = 0.16 dB

Location: -3.5, 5.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.36 T-Coil WIFI 5.3G

T-Coil WIFI 5.5G (Main antenna) Axial

Date: 2018-7-9

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5620 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 21.15 dBA/m

BWC Factor = 0.16 dB

Location: 5, -4.5, 3.7 mm

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

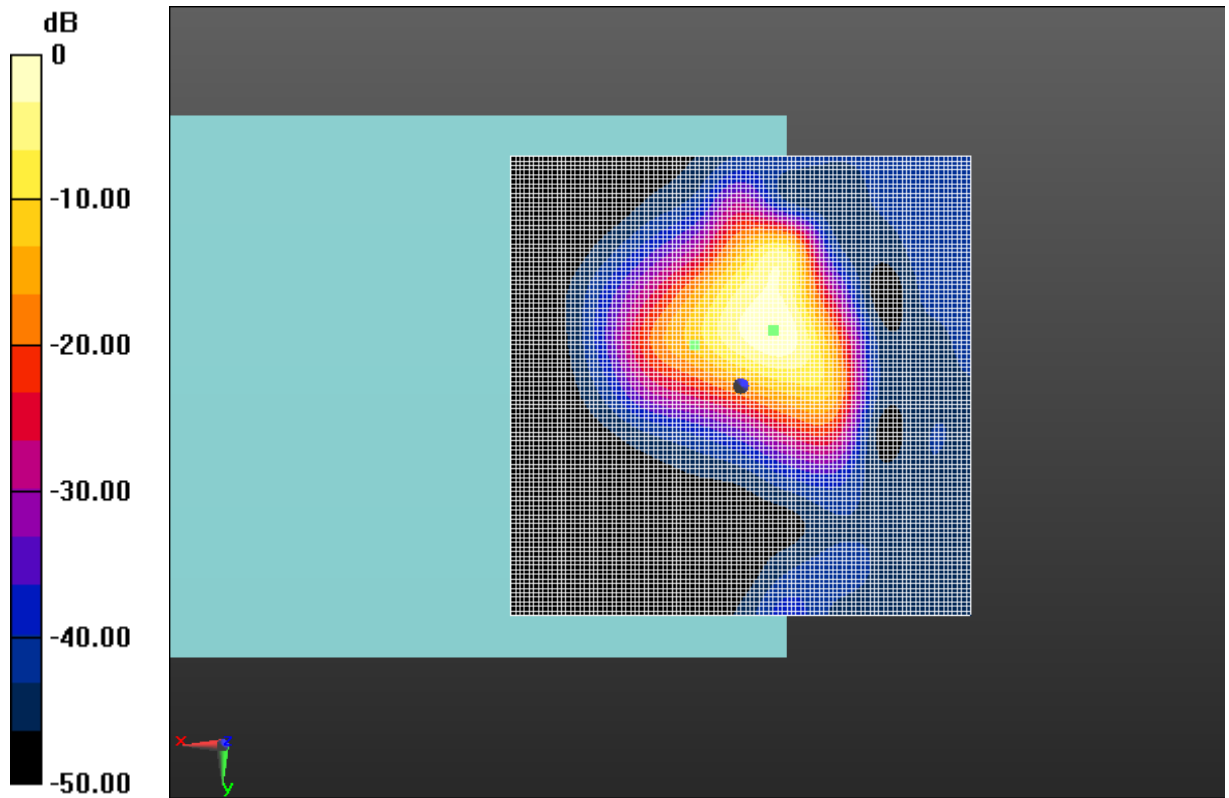
Cursor:

ABM1/ABM2 = 47.02 dB

ABM1 comp = 15.14 dBA/m

BWC Factor = 0.16 dB

Location: -3.5, -6, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.37 T-Coil WIFI 5.5G

T-Coil WIFI 5.5G (Main antenna) Transverse

Date: 2018-7-9

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5620 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 14.07 dBA/m

BWC Factor = 0.16 dB

Location: 4, -12, 3.7 mm

T-Coil/General Scans-zhu/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

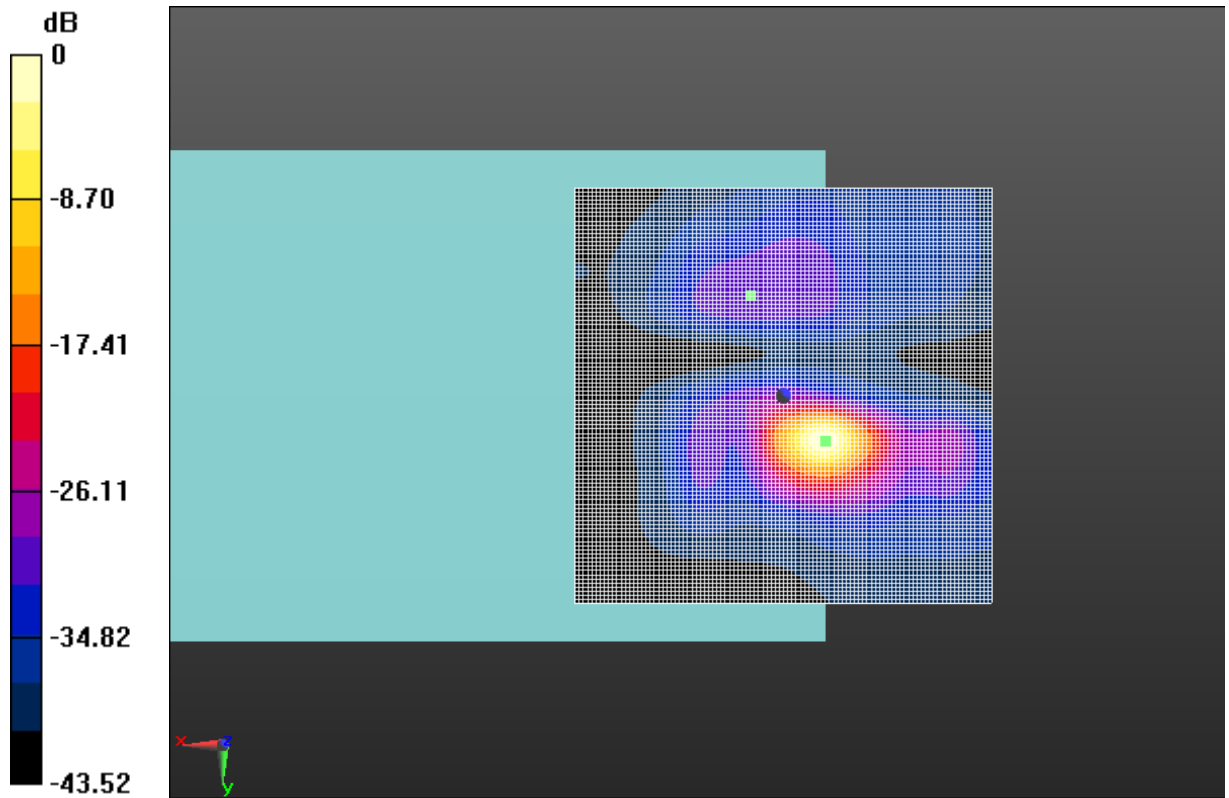
Cursor:

ABM1/ABM2 = 52.42 dB

ABM1 comp = 9.60 dBA/m

BWC Factor = 0.16 dB

Location: -5, 5.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.38 T-Coil WIFI 5.5G

T-Coil WIFI 5.8G (Main antenna) Axial

Date: 2018-7-9

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5785 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 21.71 dBA/m

BWC Factor = 0.16 dB

Location: 5, -5, 3.7 mm

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

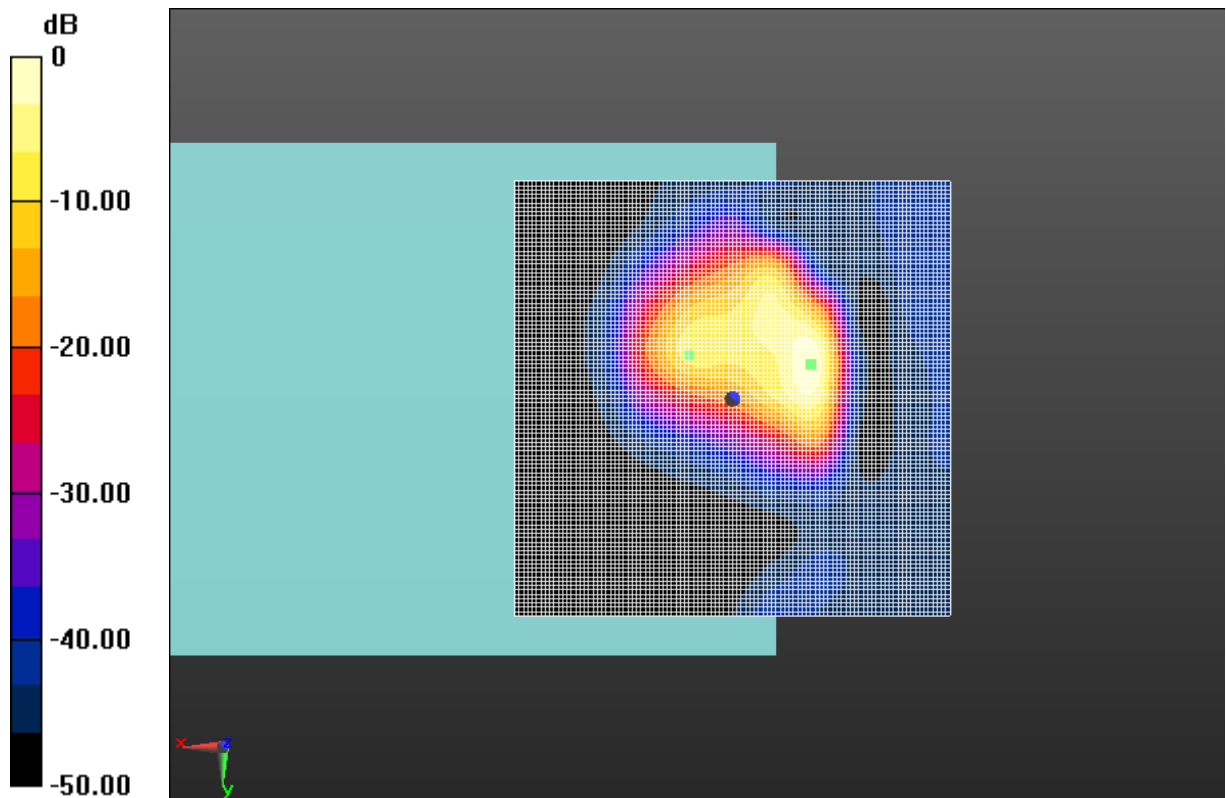
Cursor:

ABM1/ABM2 = 49.74 dB

ABM1 comp = 5.64 dBA/m

BWC Factor = 0.16 dB

Location: -9, -4, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.39 T-Coil WIFI 5.8G

T-Coil WIFI 5.8G (Main antenna) Transverse

Date: 2018-7-9

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5785 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 14.65 dBA/m

BWC Factor = 0.16 dB

Location: 5, -12, 3.7 mm

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

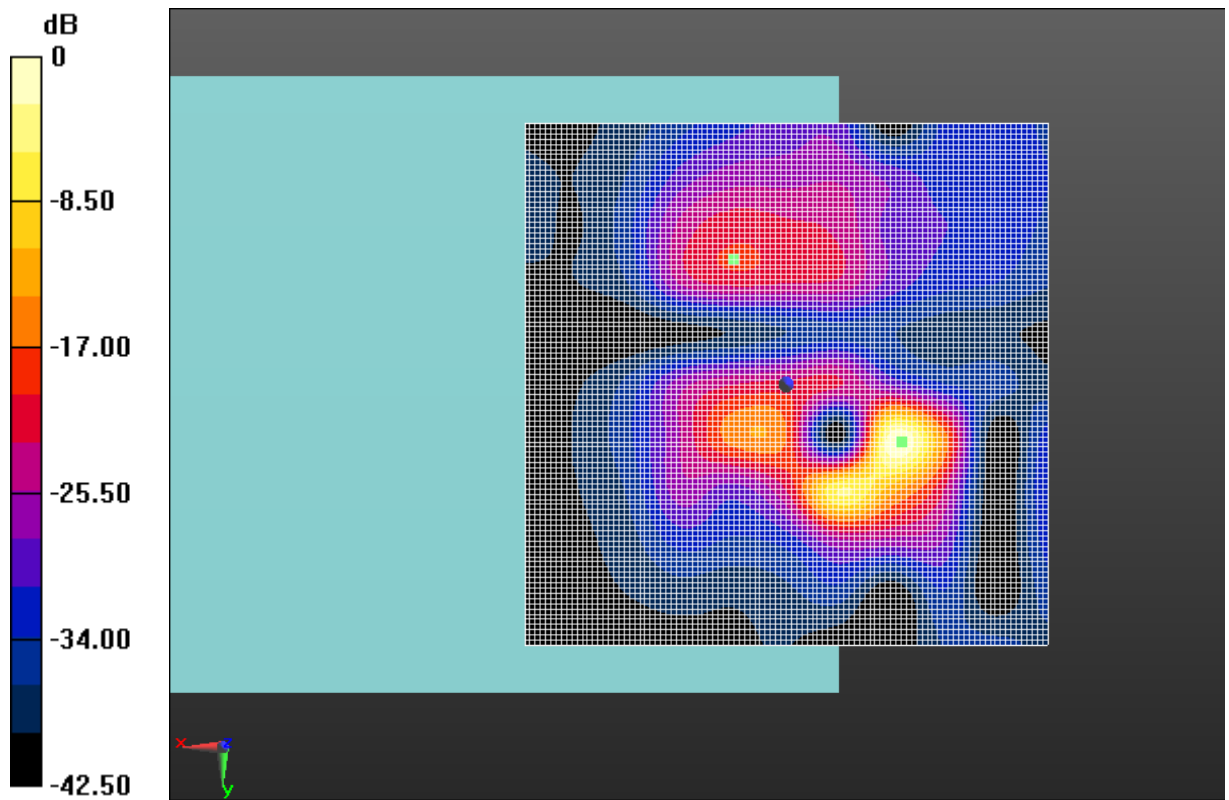
Cursor:

ABM1/ABM2 = 50.96 dB

ABM1 comp = 1.82 dBA/m

BWC Factor = 0.16 dB

Location: -11, 5.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.40 T-Coil WIFI 5.8G

T-Coil WIFI 2.4G (Second antenna) Axial

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 2437 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 22.15 dBA/m

BWC Factor = 0.16 dB

Location: 5, -4.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

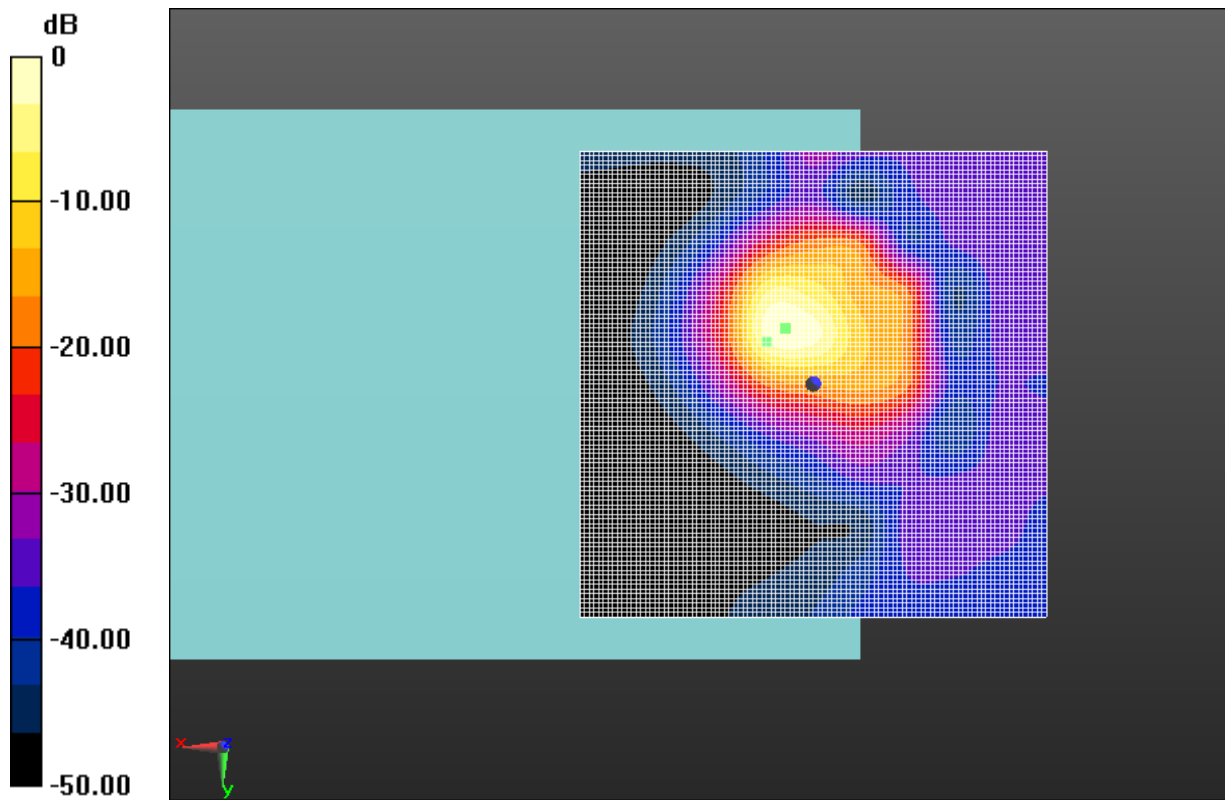
Cursor:

ABM1/ABM2 = 40.01 dB

ABM1 comp = 21.15 dBA/m

BWC Factor = 0.16 dB

Location: 3, -6, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.41 T-Coil WIFI 2.4G

T-Coil WIFI 2.4G (Second antenna) Transverse

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 2437 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.85 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

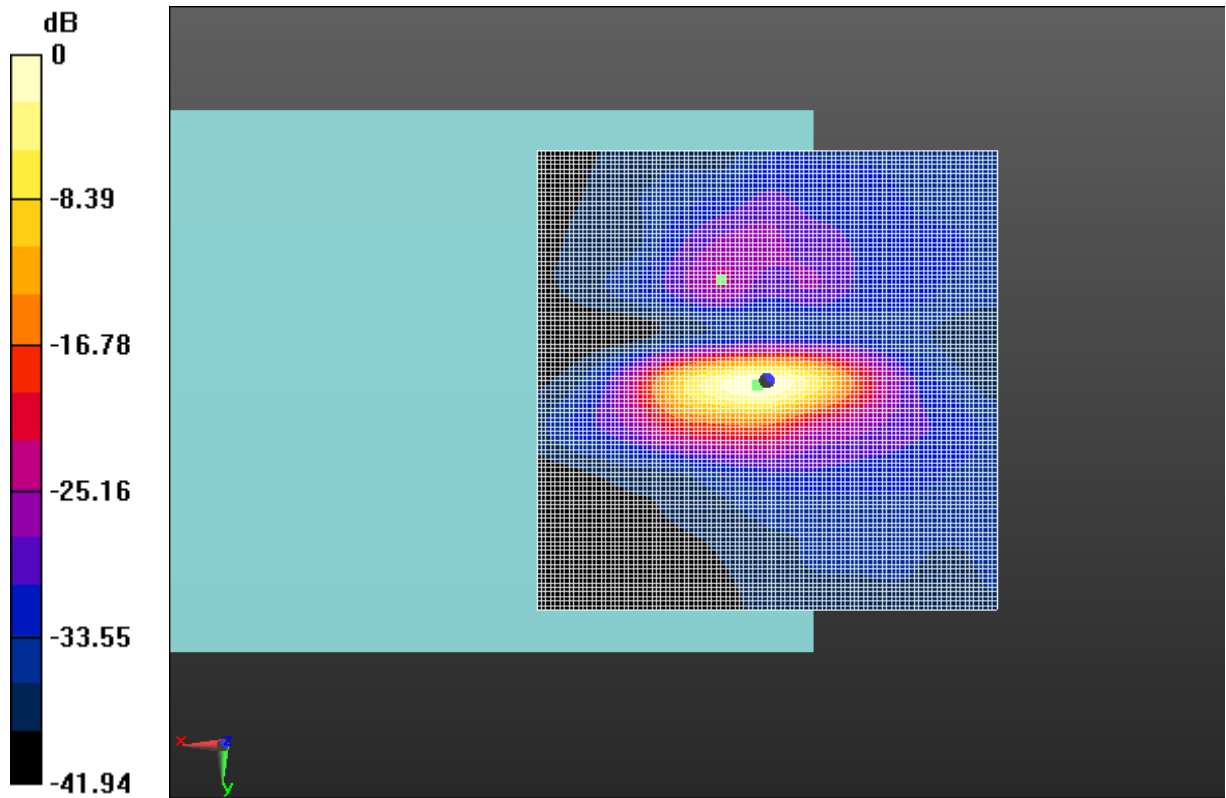
Cursor:

ABM1/ABM2 = 45.13 dB

ABM1 comp = 8.32 dBA/m

BWC Factor = 0.16 dB

Location: 1, 0.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.42 T-Coil WIFI 2.4G

T-Coil WIFI 5.2G (Second antenna) Axial

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5200 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 20.35 dBA/m

BWC Factor = 0.16 dB

Location: 5, -4.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

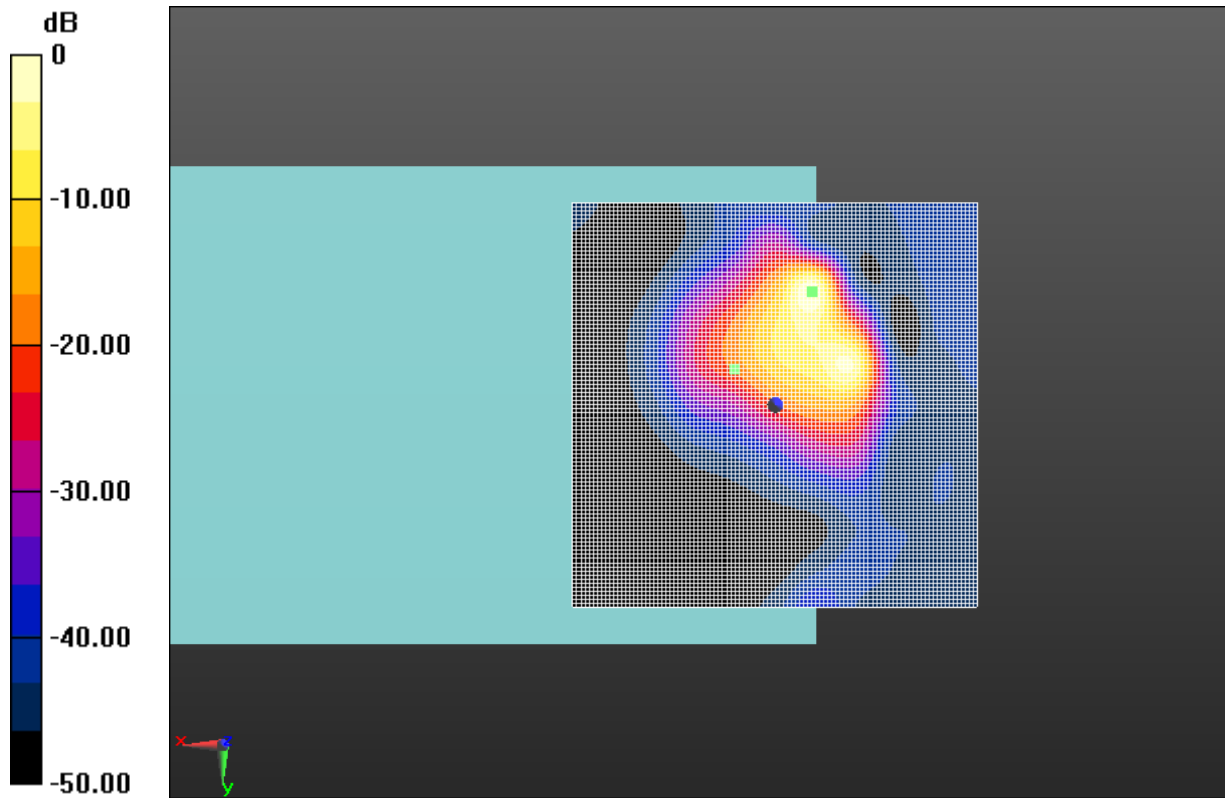
Cursor:

ABM1/ABM2 = 44.03 dB

ABM1 comp = 3.17 dBA/m

BWC Factor = 0.16 dB

Location: -4.5, -14, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.43 T-Coil WIFI 5.2G

T-Coil WIFI 5.2G (Second antenna) Transverse

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5200 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 14.12 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11.5, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

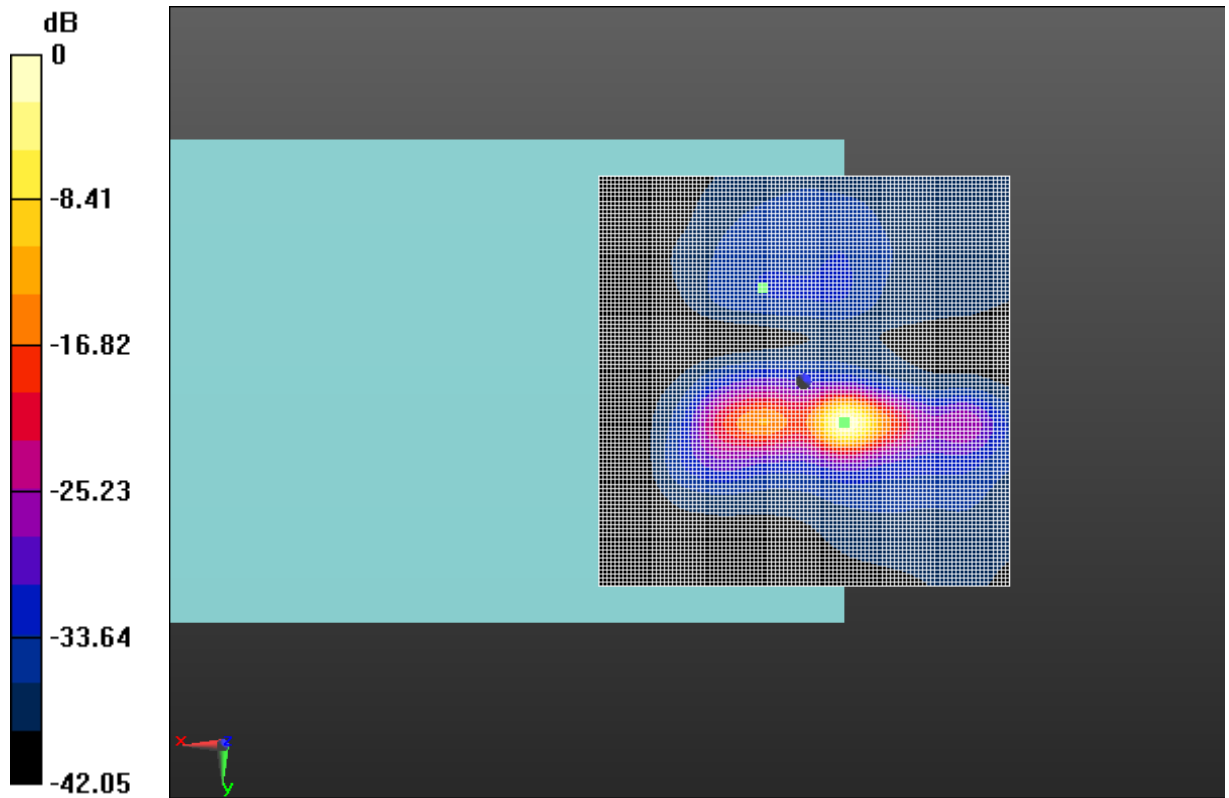
Cursor:

ABM1/ABM2 = 51.22 dB

ABM1 comp = 9.10 dBA/m

BWC Factor = 0.16 dB

Location: -5, 5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.44 T-Coil WIFI 5.2G

T-Coil WIFI 5.3G (Second antenna) Axial

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5300 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 21.65 dBA/m

BWC Factor = 0.16 dB

Location: 5, -4.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

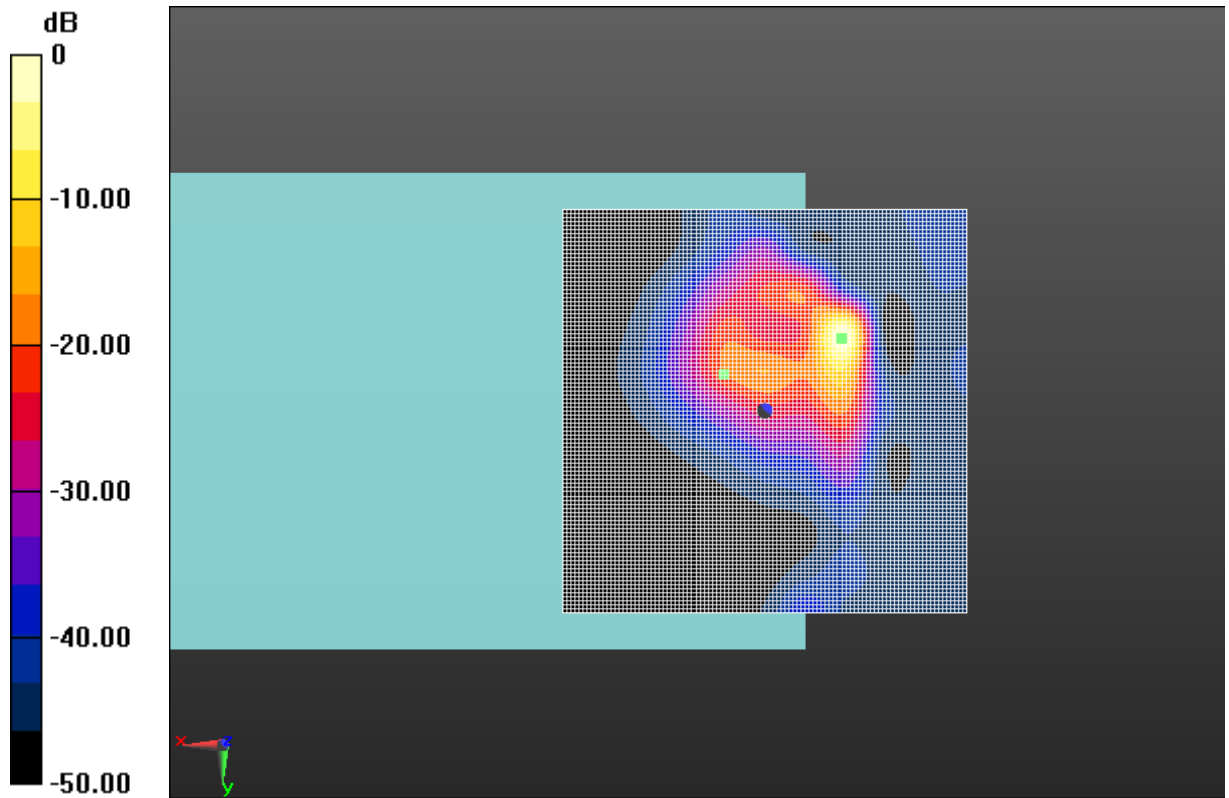
Cursor:

ABM1/ABM2 = 44.62 dB

ABM1 comp = 0.09 dBA/m

BWC Factor = 0.16 dB

Location: -9.5, -9, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.45 T-Coil WIFI 5.3G

T-Coil WIFI 5.3G (Second antenna) Transverse

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5300 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 14.81 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11.5, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

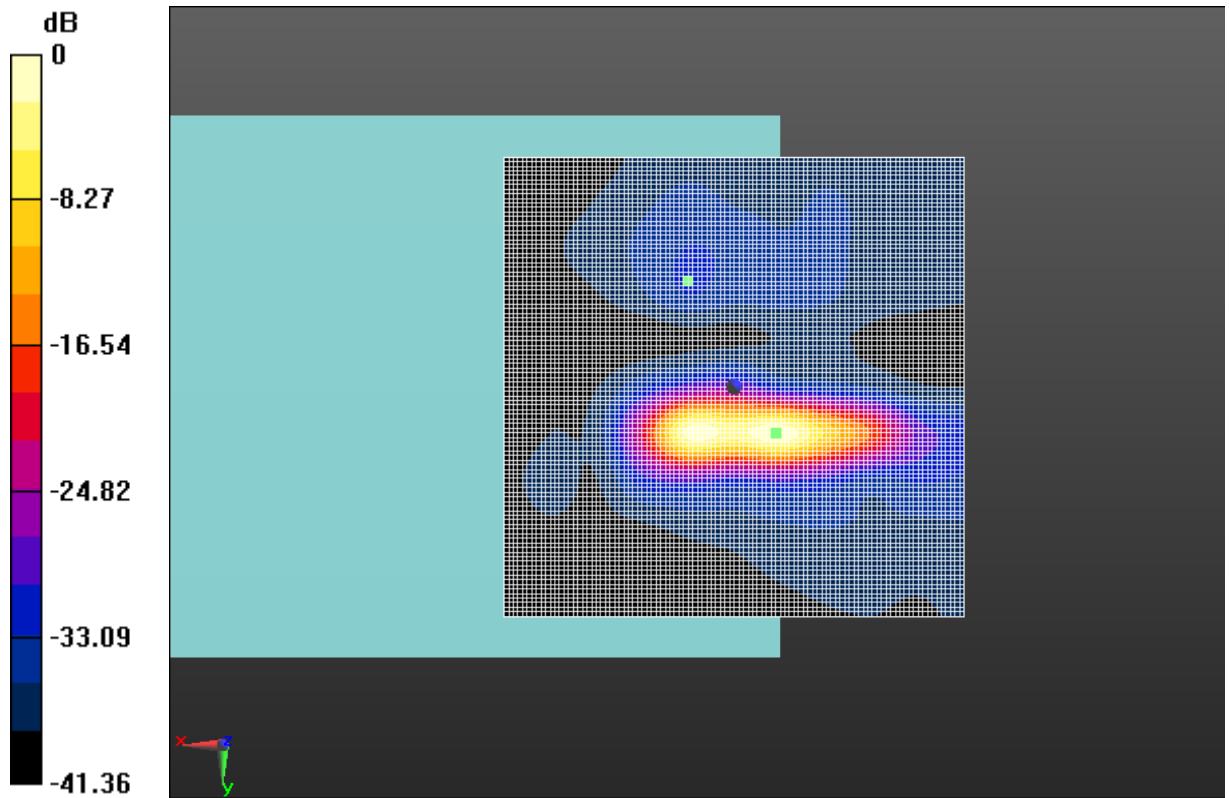
Cursor:

ABM1/ABM2 = 50.37 dB

ABM1 comp = 9.11 dBA/m

BWC Factor = 0.16 dB

Location: -4.5, 5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.46 T-Coil WIFI 5.3G

T-Coil WIFI 5.5G (Second antenna) Axial

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5620 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 20.13 dBA/m

BWC Factor = 0.16 dB

Location: 3.5, -4, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

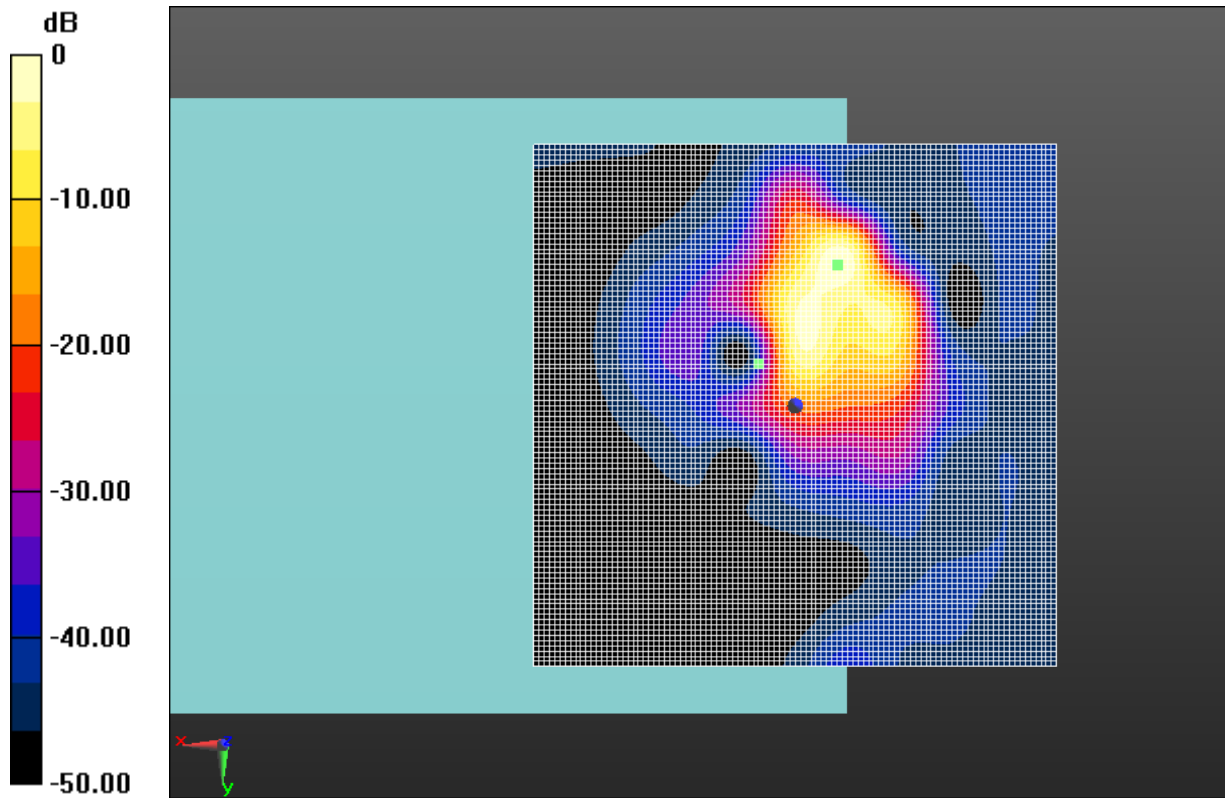
Cursor:

ABM1/ABM2 = 43.76 dB

ABM1 comp = 4.97 dBA/m

BWC Factor = 0.16 dB

Location: -4, -13.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.47 T-Coil WIFI 5.5G

T-Coil WIFI 5.5G (Second antenna) Transverse

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5620 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.40 dBA/m

BWC Factor = 0.16 dB

Location: 2, -11.5, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

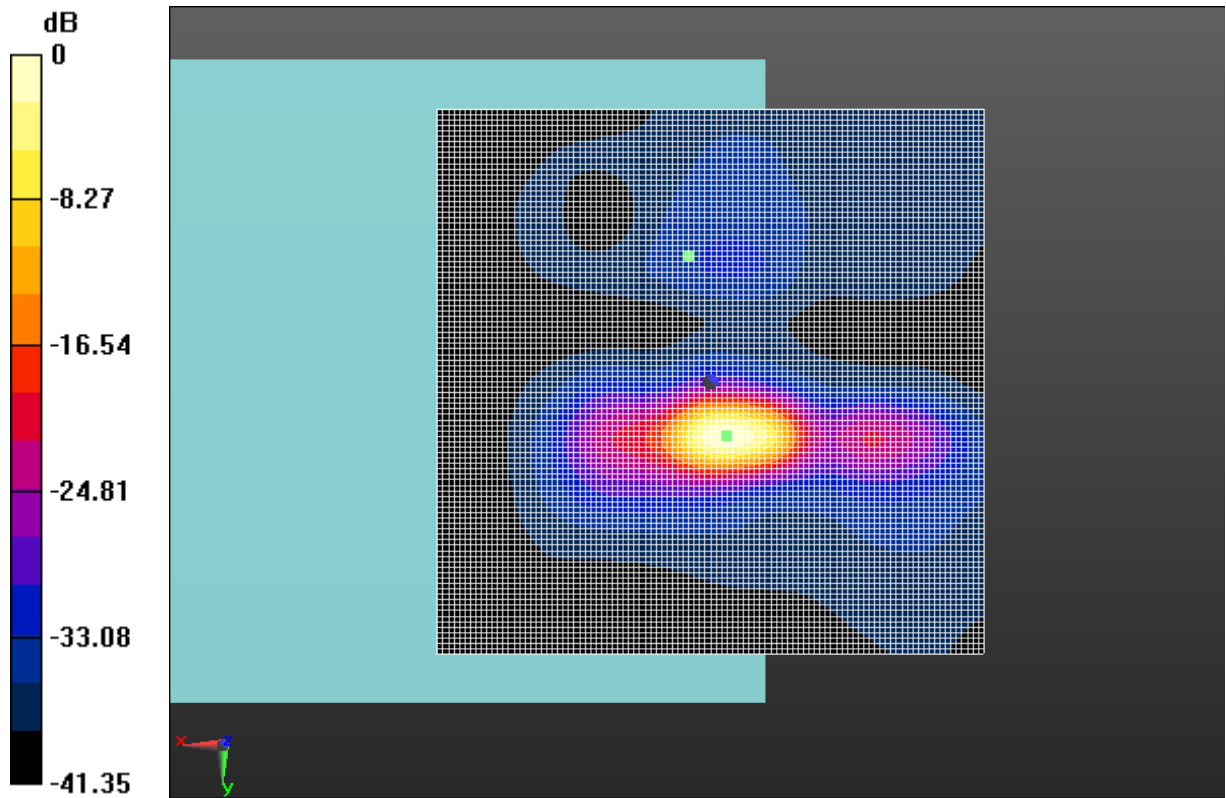
Cursor:

ABM1/ABM2 = 52.01 dB

ABM1 comp = 12.15 dBA/m

BWC Factor = 0.16 dB

Location: -1.5, 5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.48 T-Coil WIFI 5.5G

T-Coil WIFI 5.8G (Second antenna) Axial

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5785 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 21.41 dBA/m

BWC Factor = 0.16 dB

Location: 5, -4, 3.7 mm

T-Coil/General Scans /z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

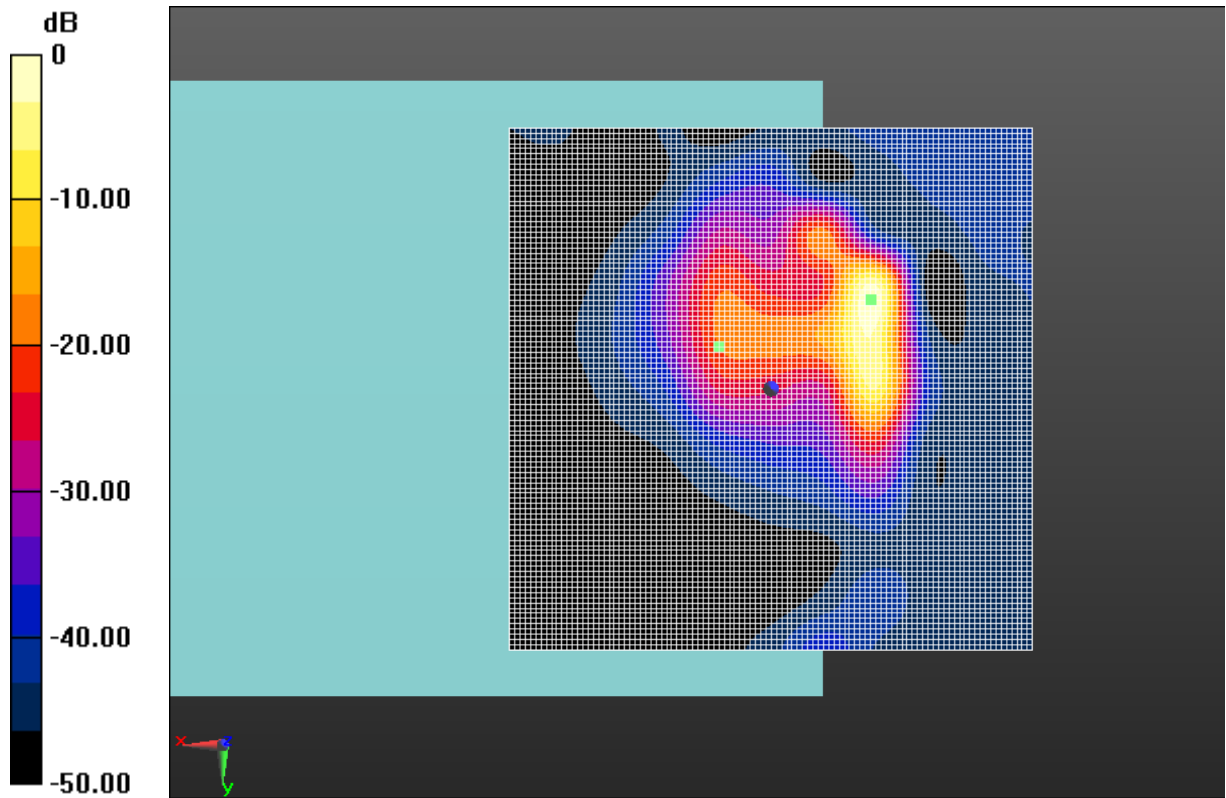
Cursor:

ABM1/ABM2 = 45.07 dB

ABM1 comp = -0.09 dBA/m

BWC Factor = 0.16 dB

Location: -9.5, -8.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.49 T-Coil WIFI 5.8G

T-Coil WIFI 5.8G (Second antenna) Transverse

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5785 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 14.51 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11, 3.7 mm

T-Coil/General Scans /y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

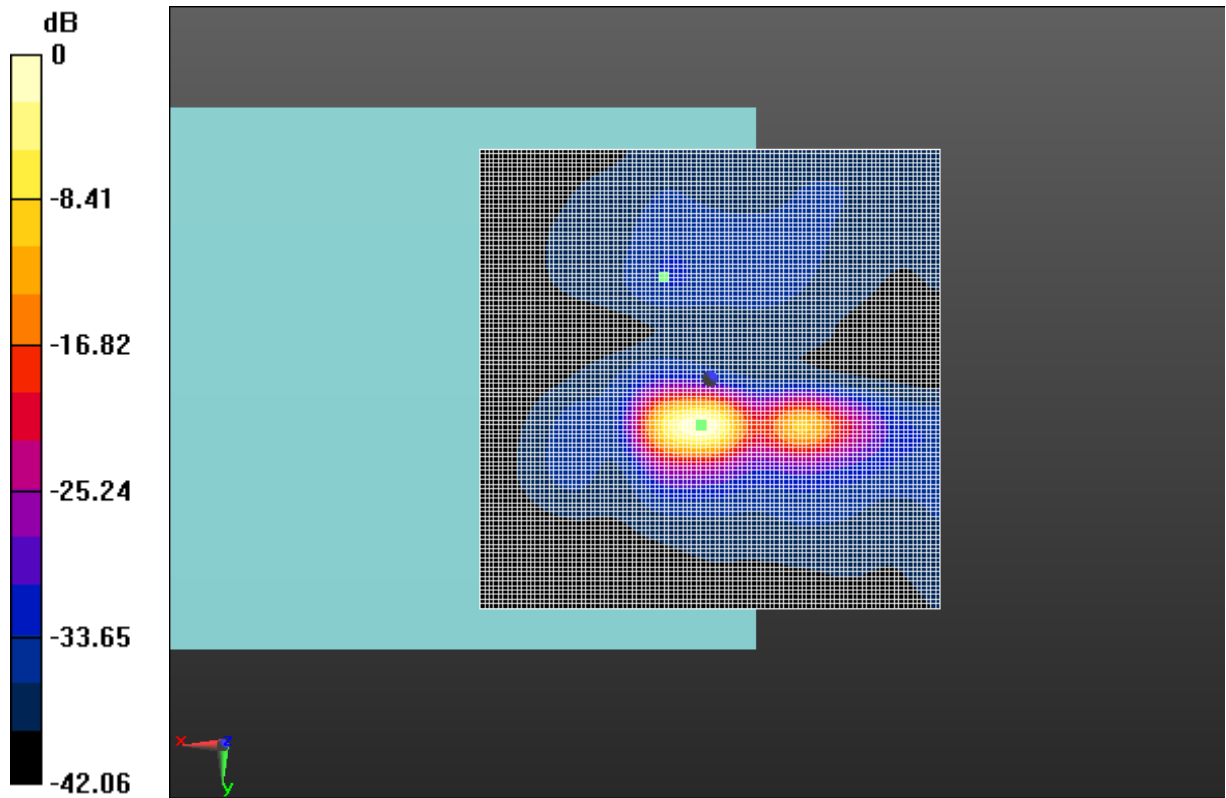
Cursor:

ABM1/ABM2 = 51.94 dB

ABM1 comp = 13.02 dBA/m

BWC Factor = 0.16 dB

Location: 1, 5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.50 T-Coil WIFI 5.8G

T-Coil WIFI 2.4G (MIMO) Axial

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 2437 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 20.86 dBA/m

BWC Factor = 0.16 dB

Location: 5, -4.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

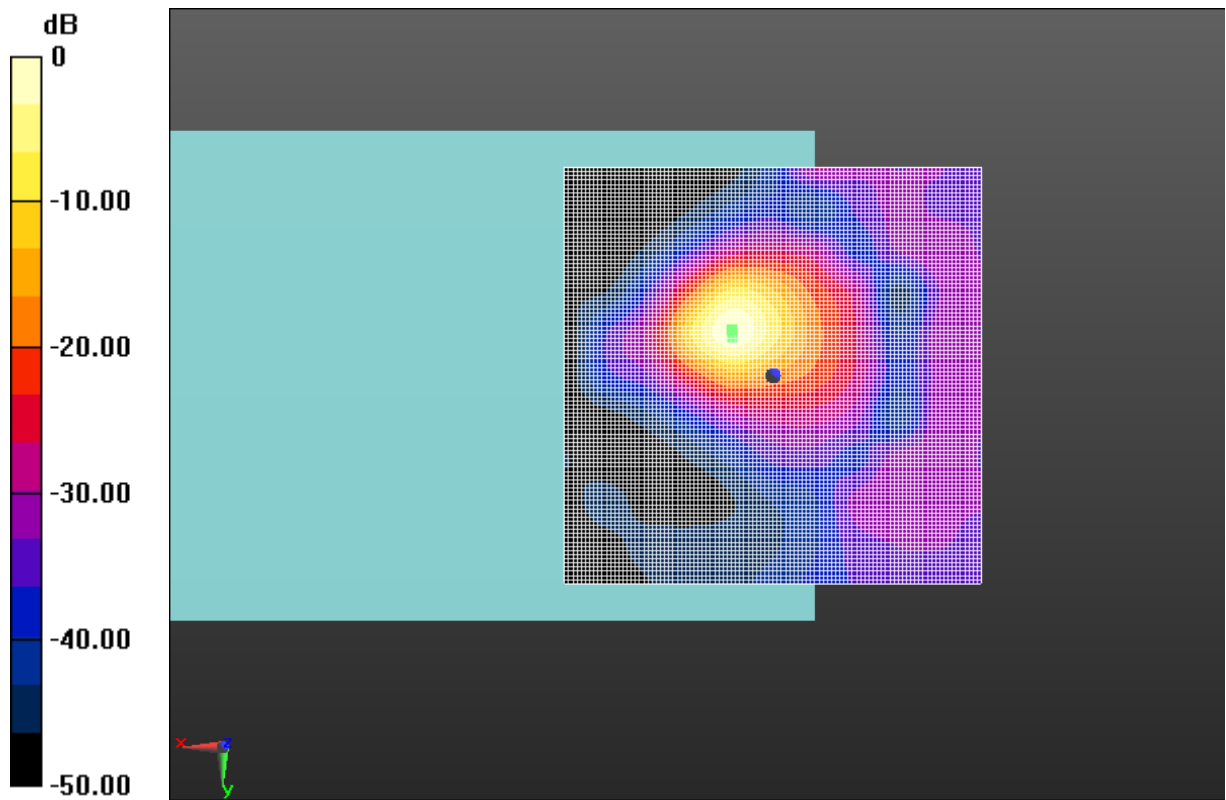
Cursor:

ABM1/ABM2 = 31.11 dB

ABM1 comp = 20.72 dBA/m

BWC Factor = 0.16 dB

Location: 5, -5.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.51 T-Coil WIFI 2.4G

T-Coil WIFI 2.4G (MIMO) Transverse

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 2437 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.50 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11.5, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

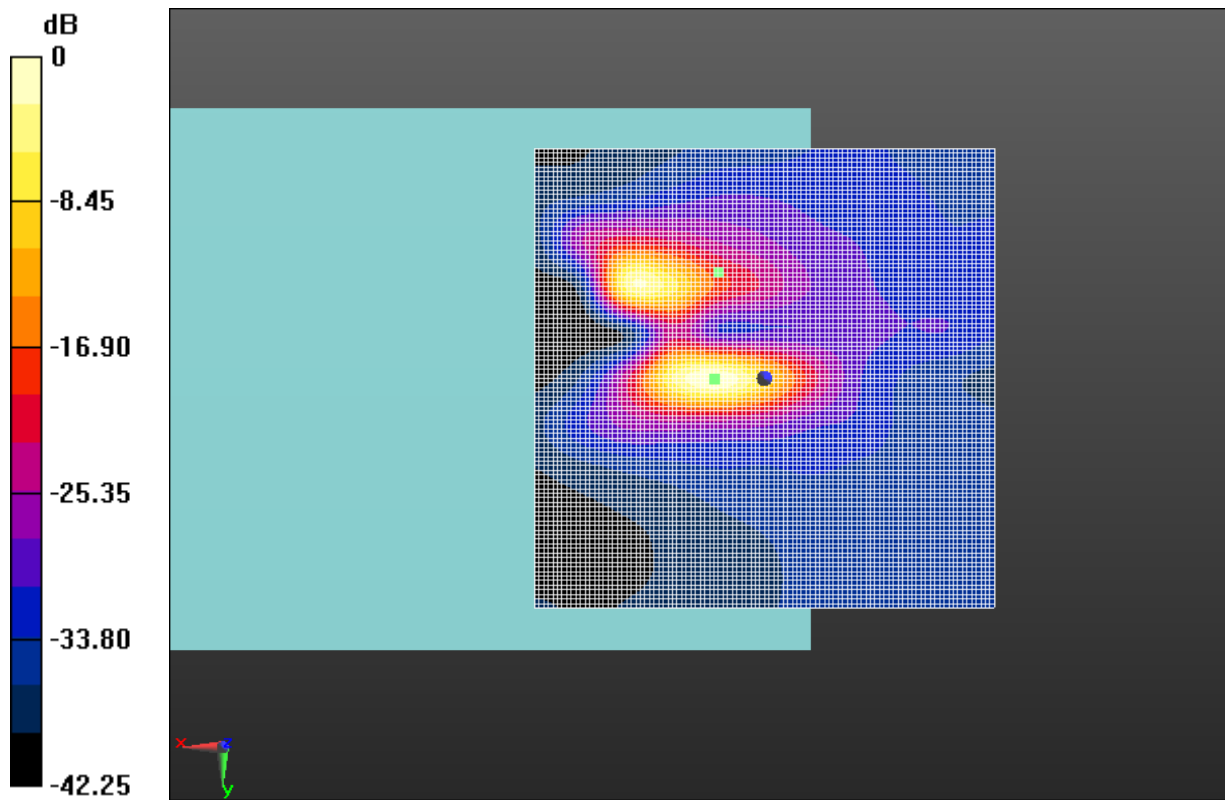
Cursor:

ABM1/ABM2 = 38.18 dB

ABM1 comp = 10.44 dBA/m

BWC Factor = 0.16 dB

Location: 5.5, 0, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.52 T-Coil WIFI 2.4G

T-Coil WIFI 5.2G (MIMO) Axial

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5200 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 20.16 dBA/m

BWC Factor = 0.16 dB

Location: 5.5, -5.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

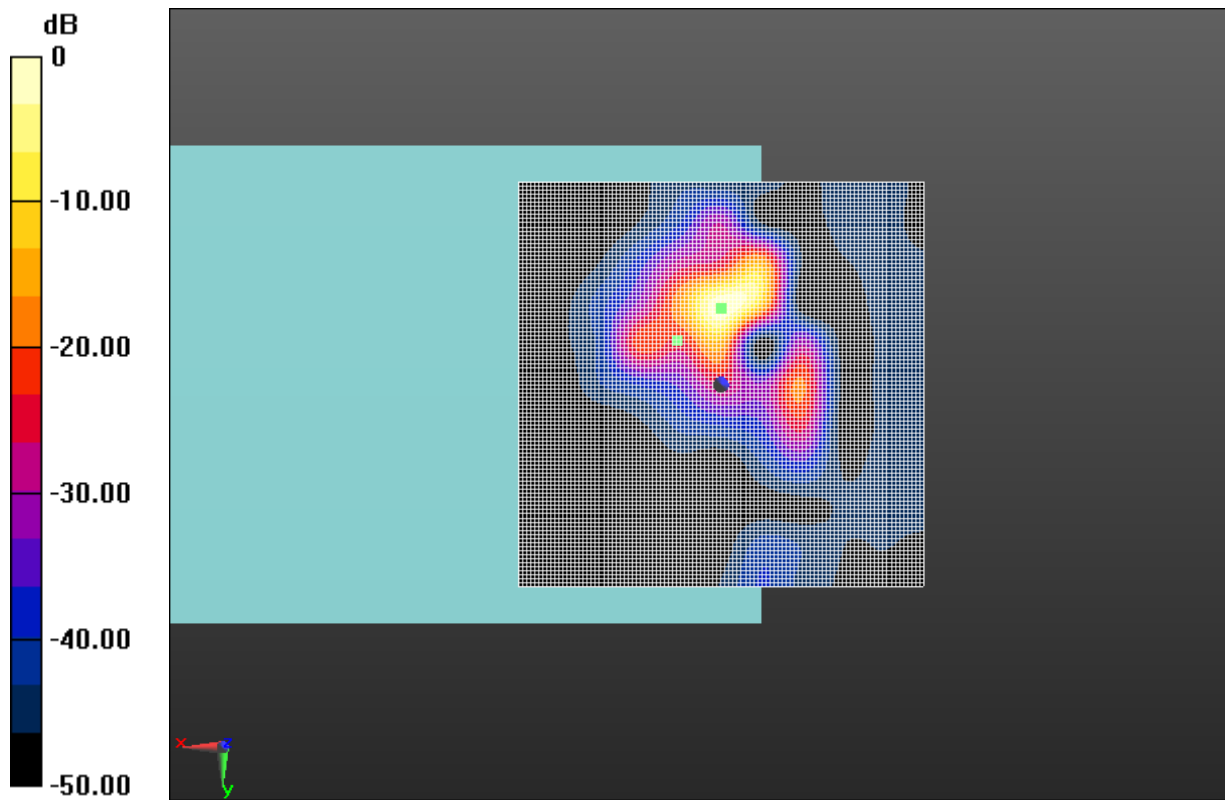
Cursor:

ABM1/ABM2 = 43.51 dB

ABM1 comp = 16.11 dBA/m

BWC Factor = 0.16 dB

Location: 0, -9.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.53 T-Coil WIFI 5.2G

T-Coil WIFI 5.2G (MIMO) Transverse

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5200 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 14.73 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

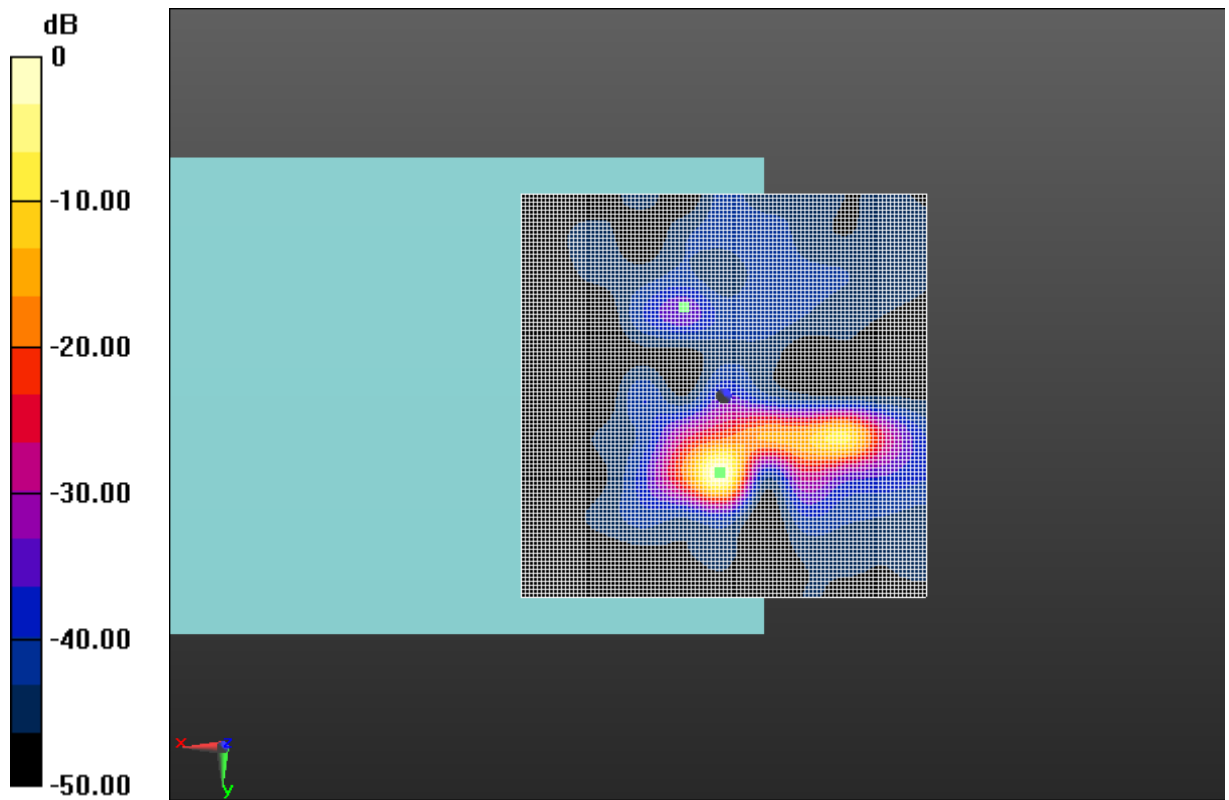
Cursor:

ABM1/ABM2 = 48.79 dB

ABM1 comp = 11.31 dBA/m

BWC Factor = 0.16 dB

Location: 0.5, 9.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.54 T-Coil WIFI 5.2G

T-Coil WIFI 5.3G (MIMO) Axial

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5300 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 18.20 dBA/m

BWC Factor = 0.16 dB

Location: 10, -4.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

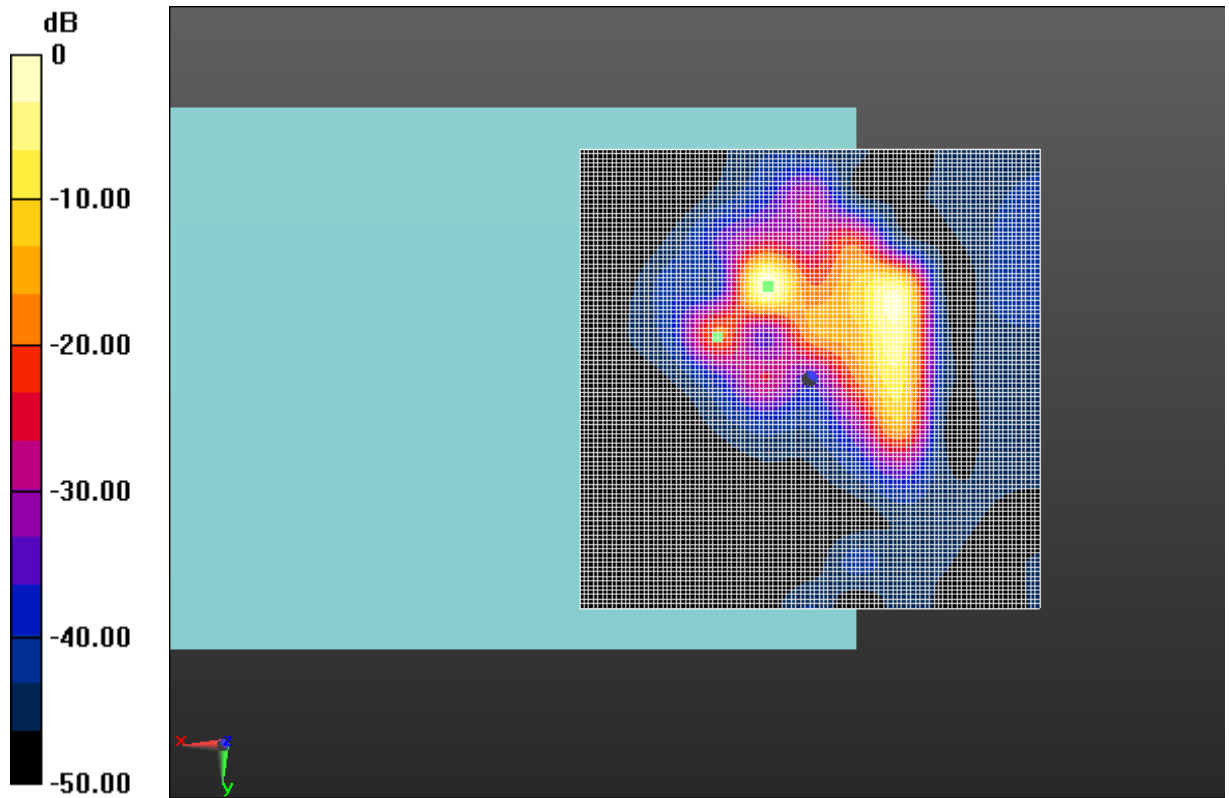
Cursor:

ABM1/ABM2 = 42.49 dB

ABM1 comp = 17.85 dBA/m

BWC Factor = 0.16 dB

Location: 4.5, -10, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.55 T-Coil WIFI 5.3G

T-Coil WIFI 5.3G (MIMO) Transverse

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5300 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.89 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11.5, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

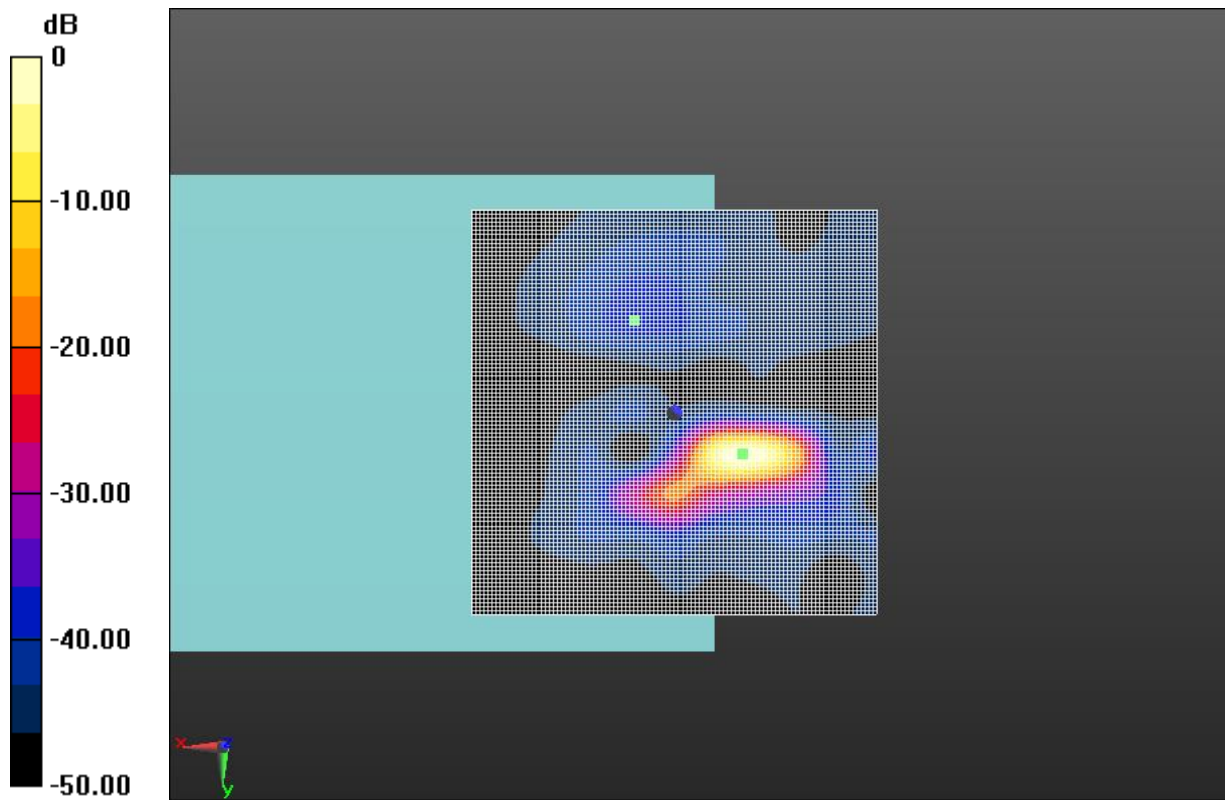
Cursor:

ABM1/ABM2 = 49.03 dB

ABM1 comp = 3.94 dBA/m

BWC Factor = 0.16 dB

Location: -8.5, 5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.56 T-Coil WIFI 5.3G

T-Coil WIFI 5.5G (MIMO) Axial

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5620 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 20.91 dBA/m

BWC Factor = 0.16 dB

Location: 4.5, -4.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

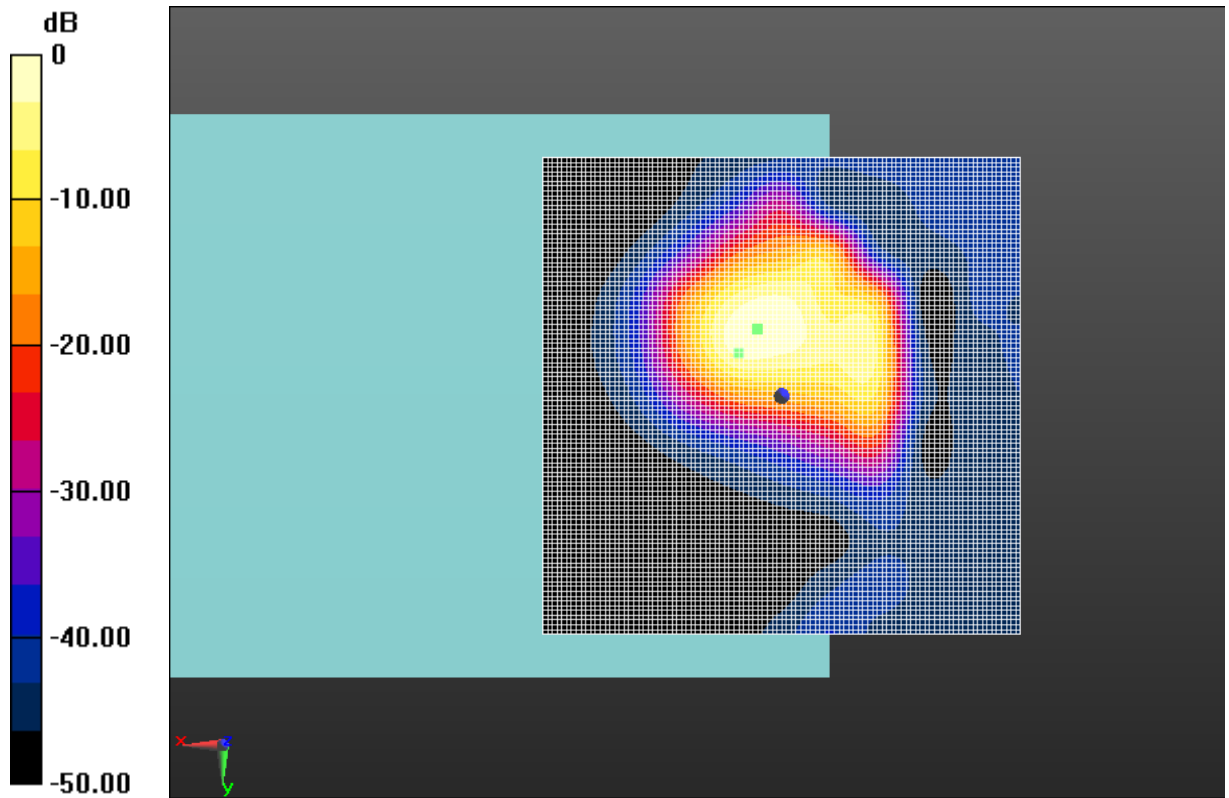
Cursor:

ABM1/ABM2 = 46.38 dB

ABM1 comp = 19.46 dBA/m

BWC Factor = 0.16 dB

Location: 2.5, -7, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.57 T-Coil WIFI 5.5G

T-Coil WIFI 5.5G (MIMO) Transverse

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5620 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.54 dBA/m

BWC Factor = 0.16 dB

Location: 4.5, -11.5, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

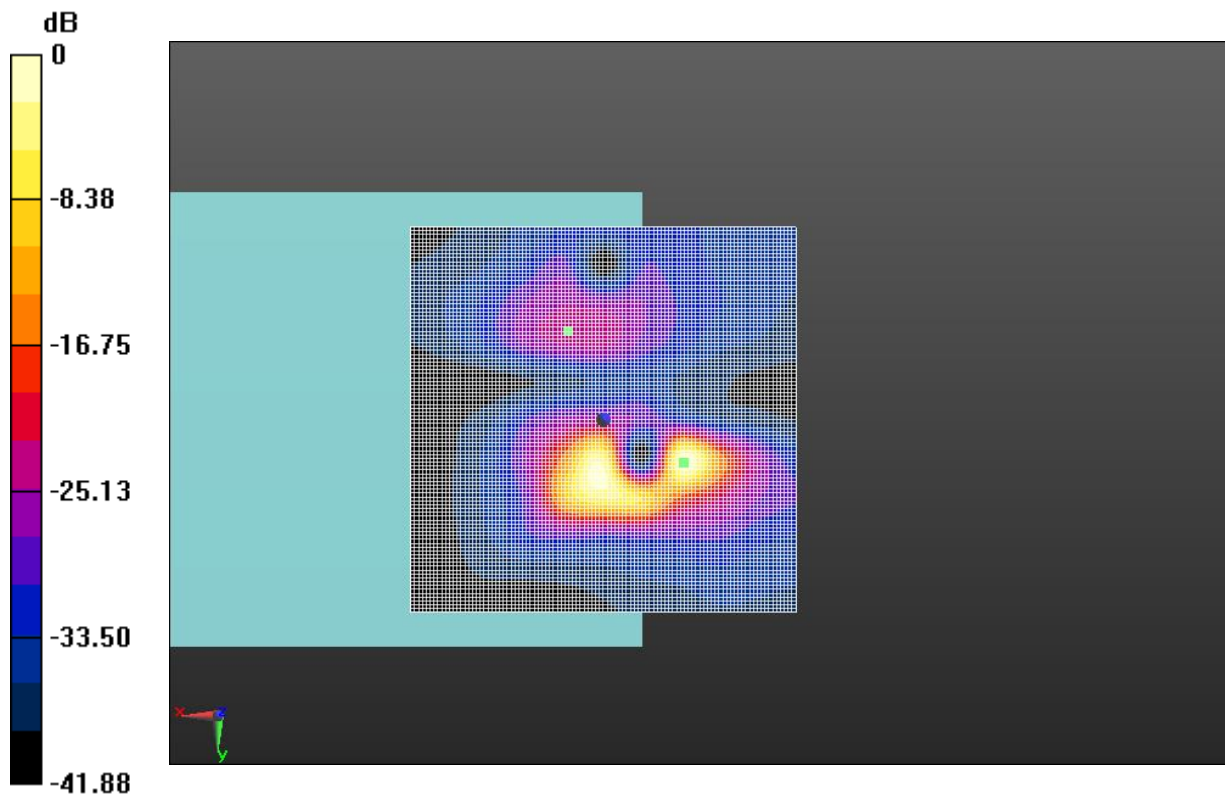
Cursor:

ABM1/ABM2 = 49.65 dB

ABM1 comp = 1.10 dBA/m

BWC Factor = 0.16 dB

Location: -10.5, 5.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.58 T-Coil WIFI 5.5G

T-Coil WIFI 5.8G (MIMO) Axial

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5785 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 21.23 dBA/m

BWC Factor = 0.16 dB

Location: 4.5, -4.5, 3.7 mm

T-Coil/General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

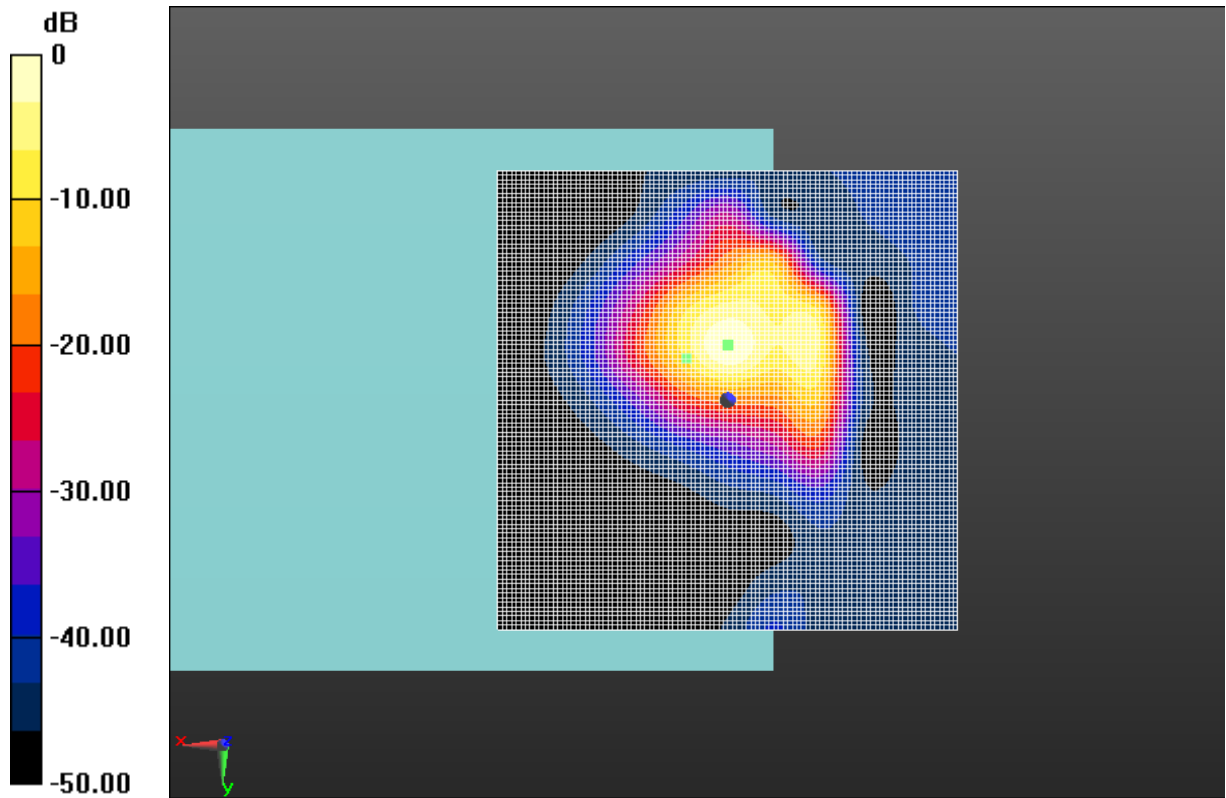
Cursor:

ABM1/ABM2 = 45.97 dB

ABM1 comp = 18.66 dBA/m

BWC Factor = 0.16 dB

Location: 0, -6, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.59 T-Coil WIFI 5.8G

T-Coil WIFI 5.8G (MIMO) Transverse

Date: 2018-7-10

Electronics: DAE4 Sn786

Medium: Air

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

Ambient Temperature: 22.0°C

Communication System: LTE-FDD Frequency: 5785 MHz Duty Cycle: 1:1

Probe: AM1DV3 - 3086

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated Signal(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1 = 13.74 dBA/m

BWC Factor = 0.16 dB

Location: 5, -11.5, 3.7 mm

T-Coil/General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z)

(101x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 37.15

Measure Window Start: 300ms

Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

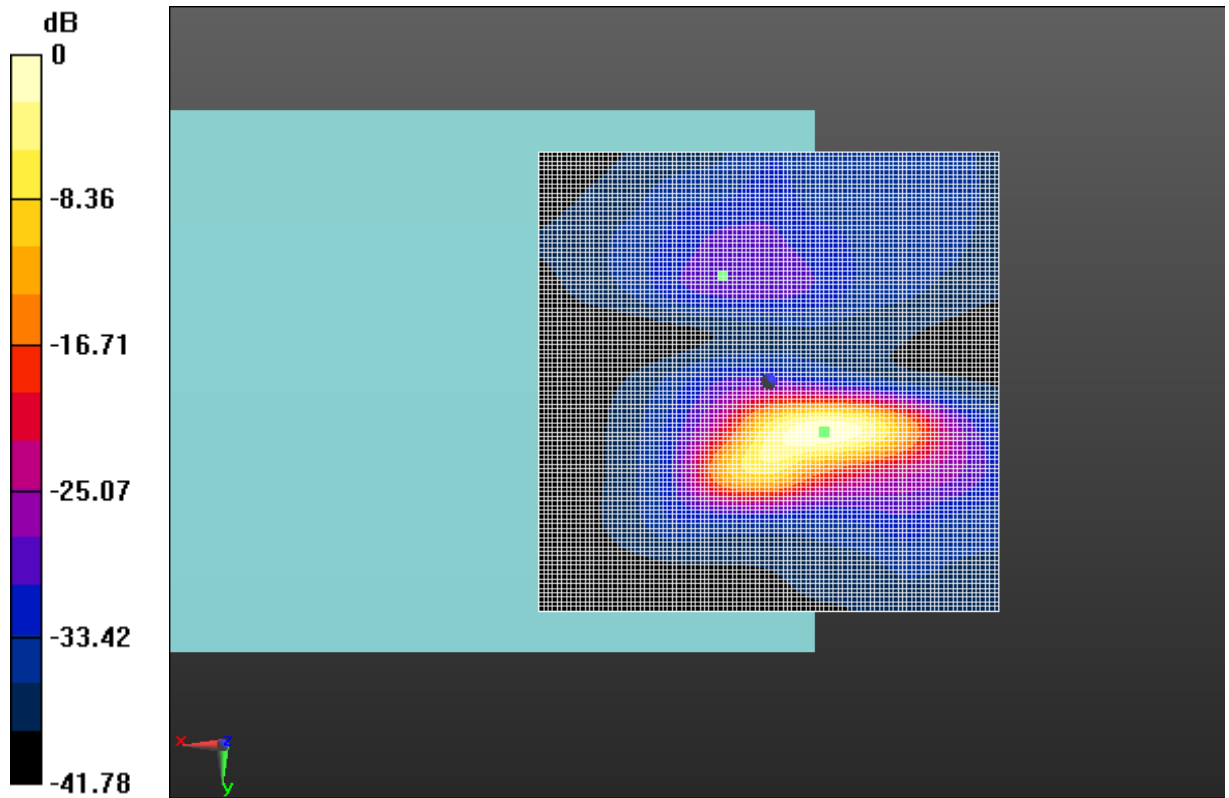
Cursor:

ABM1/ABM2 = 50.24 dB

ABM1 comp = 6.50 dBA/m

BWC Factor = 0.16 dB

Location: -6, 5.5, 3.7 mm



0 dB = 1.000 A/m = 0.00 dBA/m

Fig A.60 T-Coil WIFI 5.8G