Annex C Plots of T-Coil Test Results

T-Coil Signal Test Report

Measurement performed on May 29, 2025 at 16:57

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

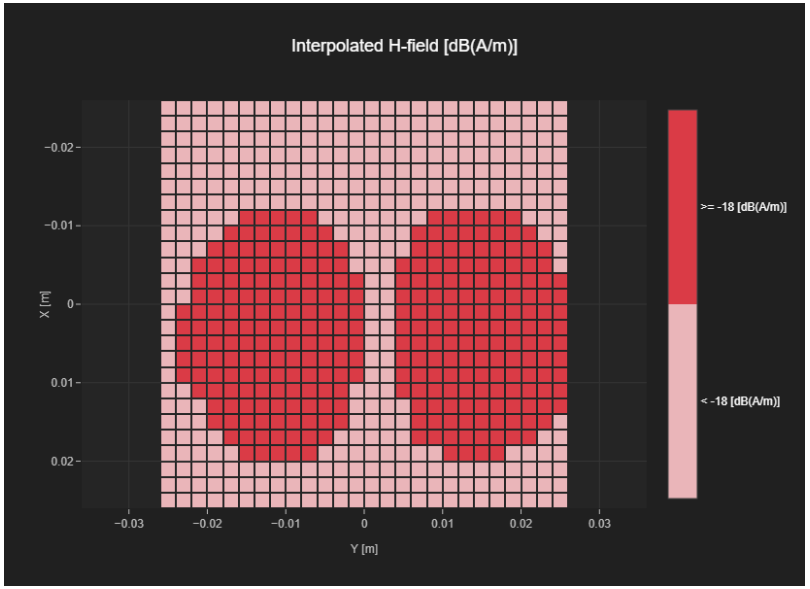
Band Name	Communication Systems Name	Channel	Frequency [MHz]
GSM 850	GSM-FDD (TDMA, GMSK)	189	836.4

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Gain [dB]	Hmax [dB(A/m)]
48k_voice_1kHz_1s.wav	2.0	-12.02	-7.35


Interpolated H-field [dB(A/m)]
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
>= -18 [dB(A/m)]
< -18 [dB(A/m)]

T-Coil Noise Test Report

Measurement performed on May 29, 2025 at 17:06

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

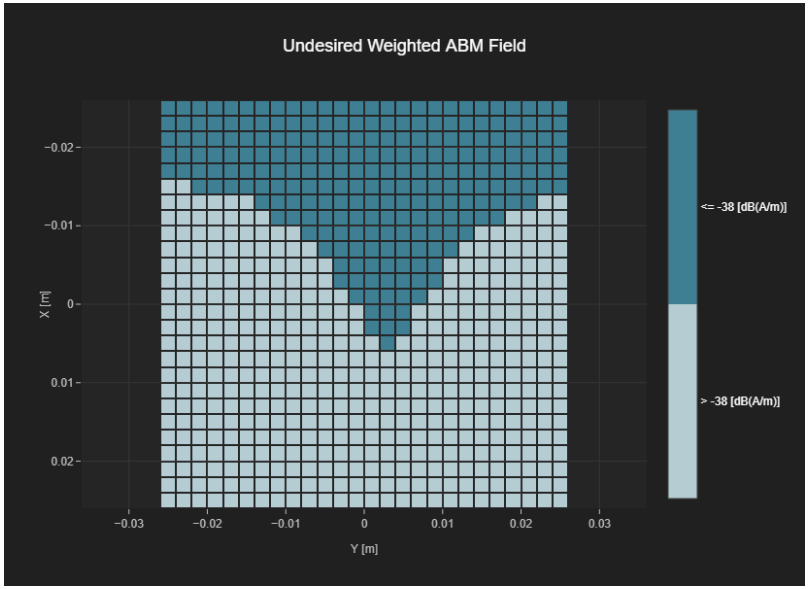
Band Name	Communication Systems Name	Channel	Frequency [MHz]
GSM 850	GSM-FDD (TDMA, GMSK)	189	836.4

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

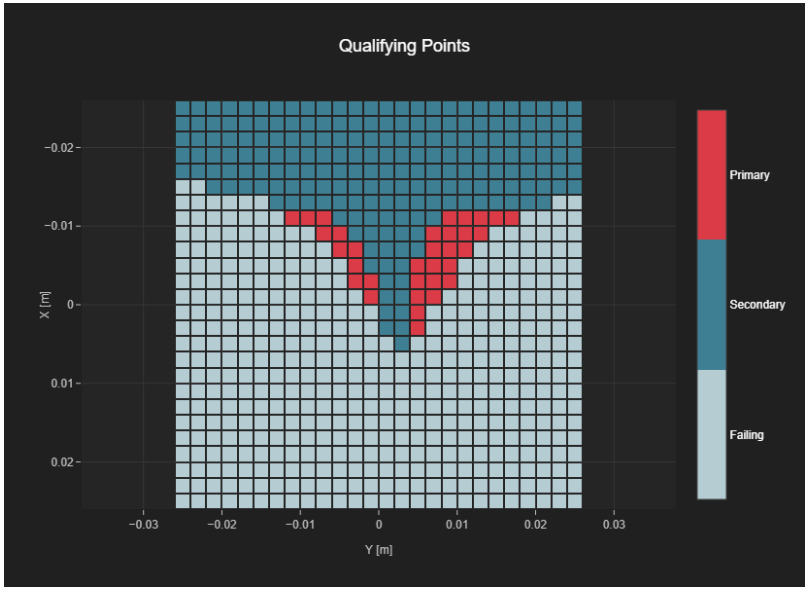
Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse	Hmax [dB(A/m)]
233	16	26	-14.64


Undesired Weighted ABM Field
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
<= -38 [dB(A/m)]
> -38 [dB(A/m)]

T-Coil Coupling Mode Test Report

Results

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
33	233	16	26



T-Coil Signal Test Report

Measurement performed on May 29, 2025 at 16:57

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

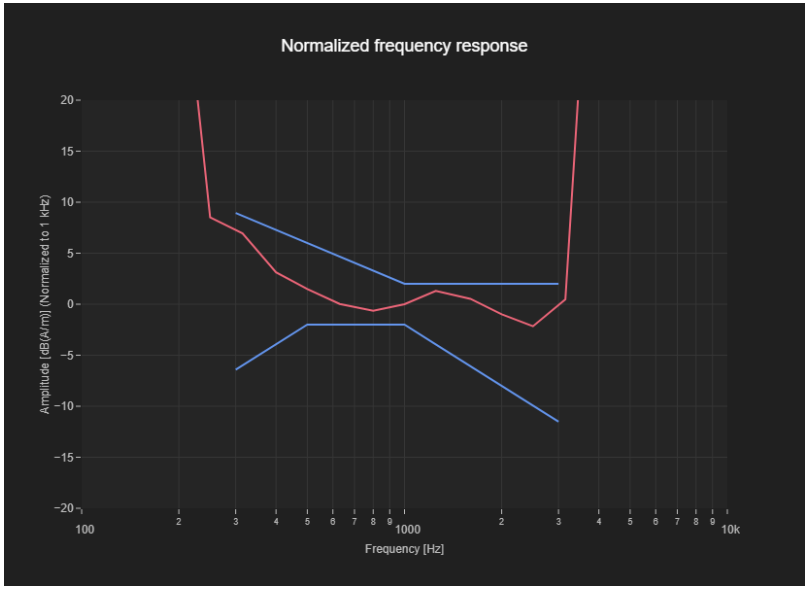
Band Name	Communication Systems Name	Channel	Frequency [MHz]
GSM 850	GSM-FDD (TDMA, GMSK)	189	836.4

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Margin Upper Bound [dB]	Margin Lower Bound [dB]
48k_voice_300-3000_2s.wav	2.0	0.7	1.36


Normalized frequency response
Amplitude [dB(A/m)] (Normalized to 1 kHz)
20
15
10
5
0
−5
−10
−15
−20
100
2
3
4
5
6
7
8
9
1000
2
3
4
5
6
7
8
9
10k
Frequency [Hz]

T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 10:33

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

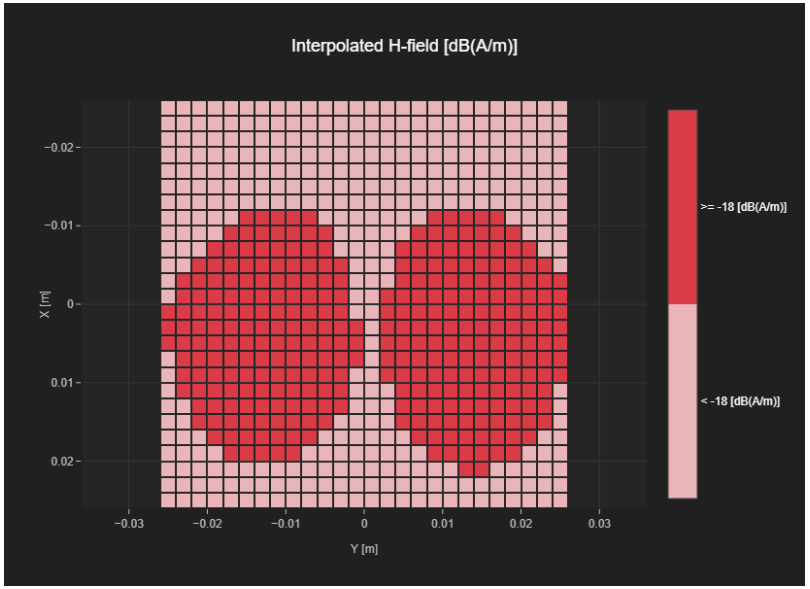
Band Name	Communication Systems Name	Channel	Frequency [MHz]
PCS 1900	GSM-FDD (TDMA, GMSK)	661	1880.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Gain [dB]	Hmax [dB(A/m)]
48k_voice_1kHz_1s.wav	2.0	-12.02	-7.24


Interpolated H-field [dB(A/m)]
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
>= -18 [dB(A/m)]
< -18 [dB(A/m)]

T-Coil Noise Test Report

Measurement performed on May 30, 2025 at 10:43

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

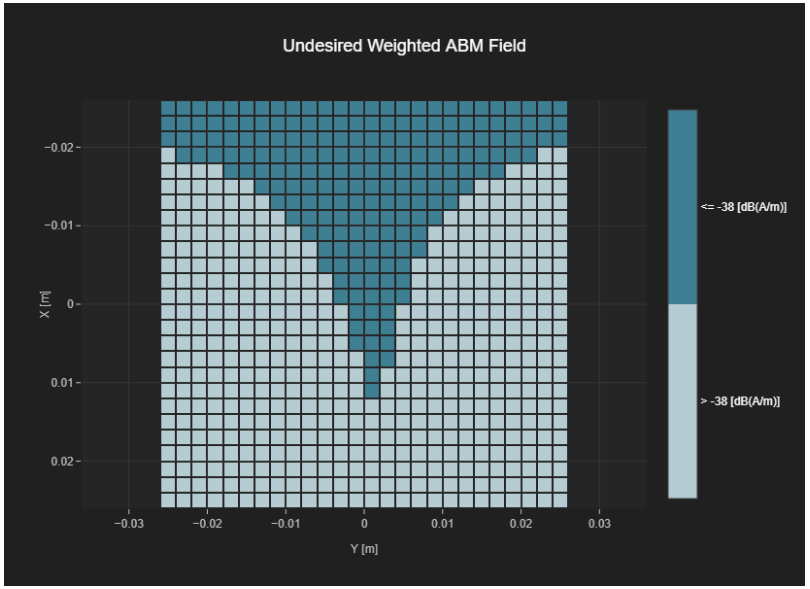
Band Name	Communication Systems Name	Channel	Frequency [MHz]
PCS 1900	GSM-FDD (TDMA, GMSK)	661	1880.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

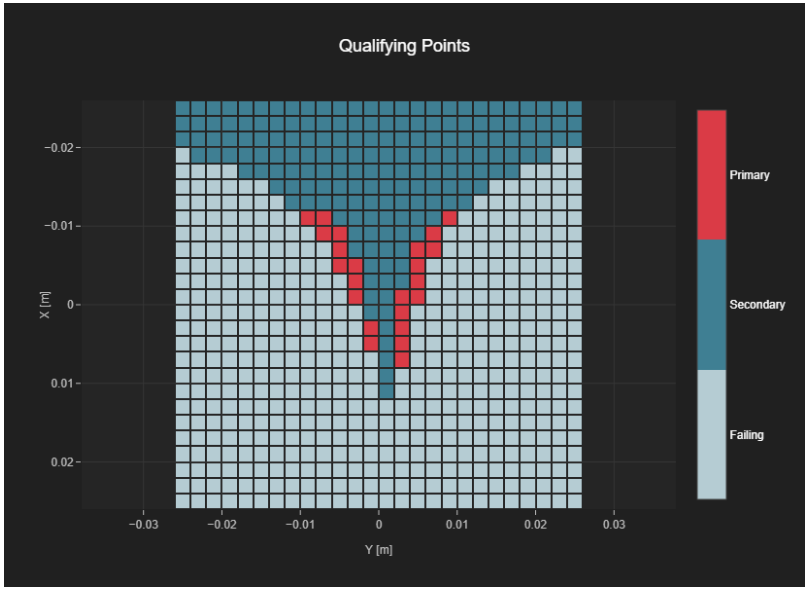
Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse	Hmax [dB(A/m)]
199	19	26	-11.68


Undesired Weighted ABM Field
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
<= -38 [dB(A/m)]
> -38 [dB(A/m)]

T-Coil Coupling Mode Test Report

Results

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
32	199	19	26



T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 10:33

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

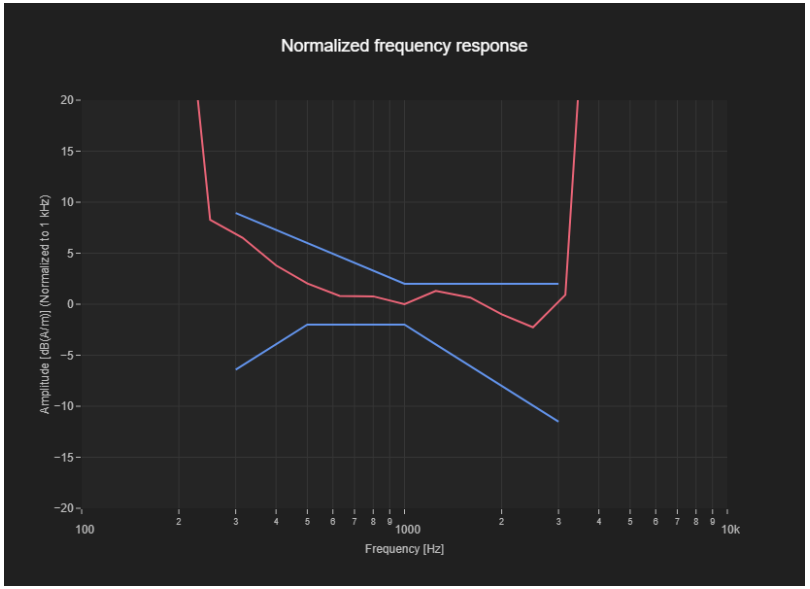
Band Name	Communication Systems Name	Channel	Frequency [MHz]
PCS 1900	GSM-FDD (TDMA, GMSK)	661	1880.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Margin Upper Bound [dB]	Margin Lower Bound [dB]
48k_voice_300-3000_2s.wav	2.0	0.7	2.0


Normalized frequency response
Amplitude [dB(A/m)] (Normalized to 1 kHz)
20
15
10
5
0
−5
−10
−15
−20
100
2
3
4
5
6
7
8
9
1000
2
3
4
5
6
7
8
9
10k
Frequency [Hz]

T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 13:52

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

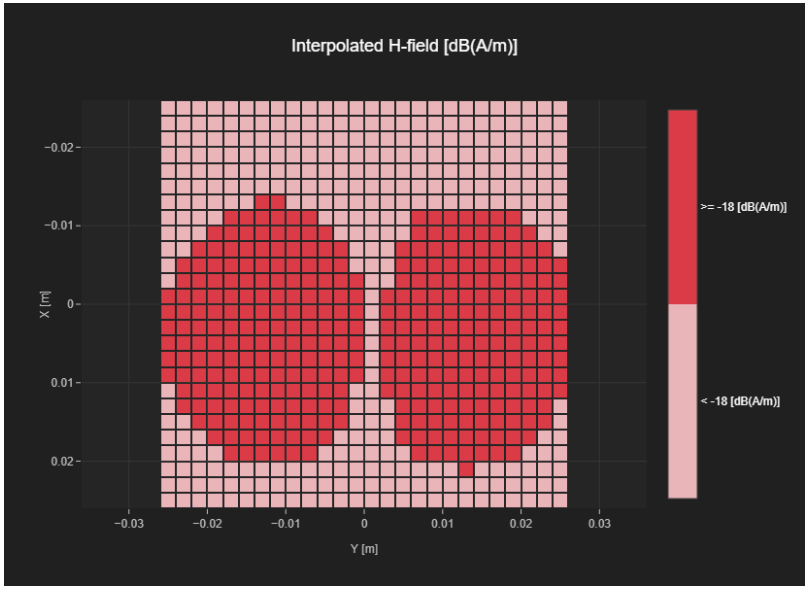
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 2	UMTS-FDD (WCDMA)	9400	1880.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Gain [dB]	Hmax [dB(A/m)]
48k_voice_1kHz_1s.wav	2.0	-12.02	-5.9


Interpolated H-field [dB(A/m)]
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
>= -18 [dB(A/m)]
< -18 [dB(A/m)]

T-Coil Noise Test Report

Measurement performed on May 30, 2025 at 14:03

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

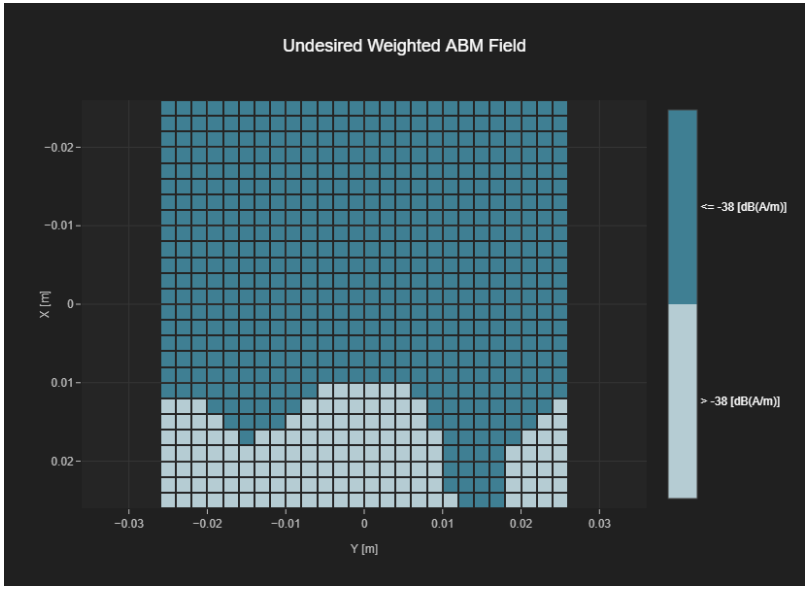
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 2	UMTS-FDD (WCDMA)	9400	1880.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

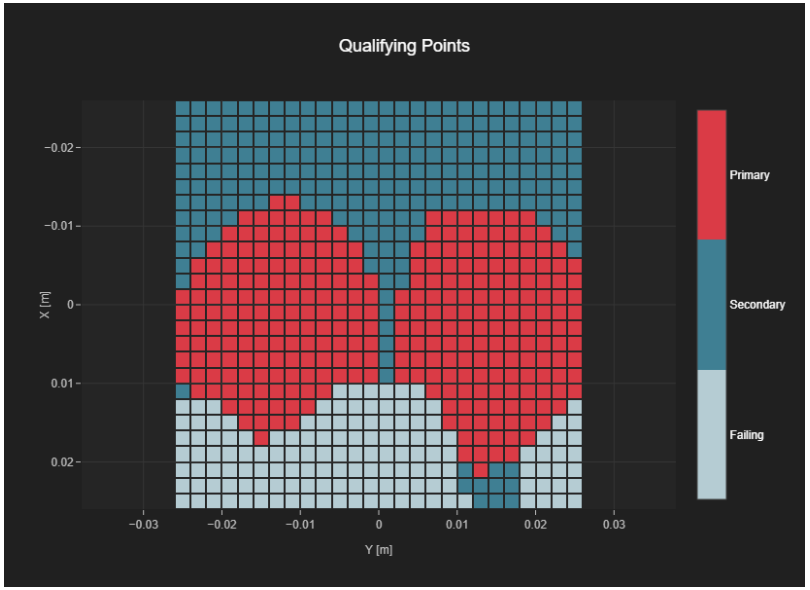
Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse	Hmax [dB(A/m)]
534	26	26	-28.05


Undesired Weighted ABM Field
X [m]
−0.02
−0.01
0
0.01
0.02
Y [m]
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
<= -38 [dB(A/m)]
> -38 [dB(A/m)]

T-Coil Coupling Mode Test Report

Results

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
301	534	26	26



T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 13:52

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

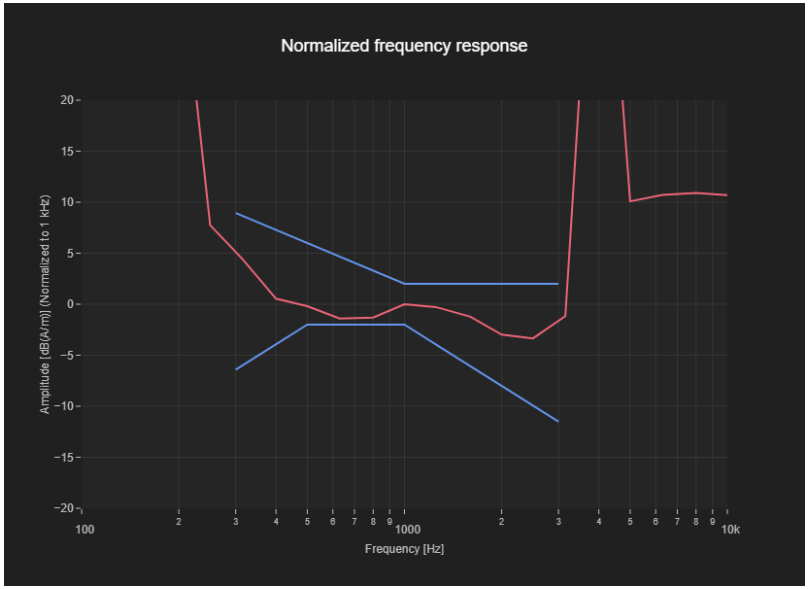
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 2	UMTS-FDD (WCDMA)	9400	1880.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Margin Upper Bound [dB]	Margin Lower Bound [dB]
48k_voice_300-3000_2s.wav	2.0	2.0	0.6


Normalized frequency response
Amplitude [dB(A/m)] (Normalized to 1 kHz)
20
15
10
5
0
−5
−10
−15
−20
100
2
3
4
5
6
7
8
9
1000
2
3
4
5
6
7
8
9
10k
Frequency [Hz]

T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 13:26

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

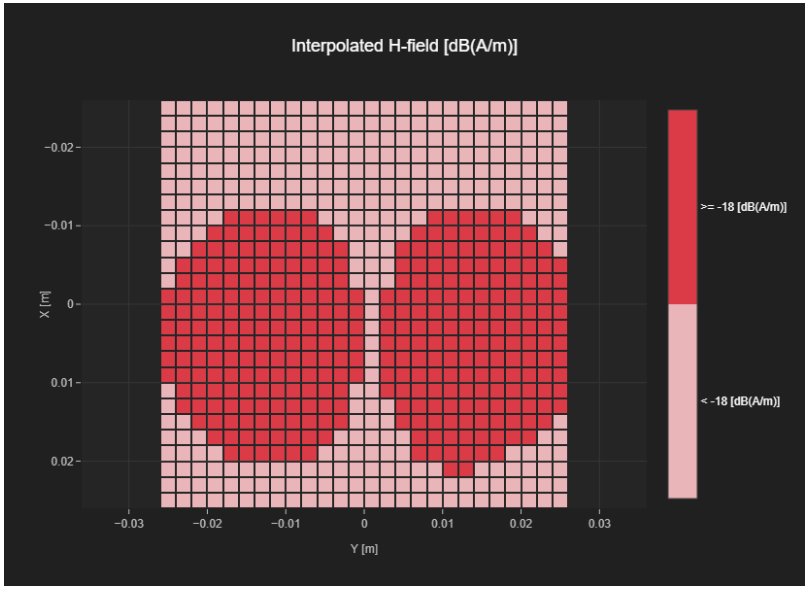
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 4	UMTS-FDD (WCDMA)	1413	1732.6

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Gain [dB]	Hmax [dB(A/m)]
48k_voice_1kHz_1s.wav	2.0	-12.02	-6.04


Interpolated H-field [dB(A/m)]
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
>= -18 [dB(A/m)]
< -18 [dB(A/m)]

T-Coil Noise Test Report

Measurement performed on May 30, 2025 at 13:36

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

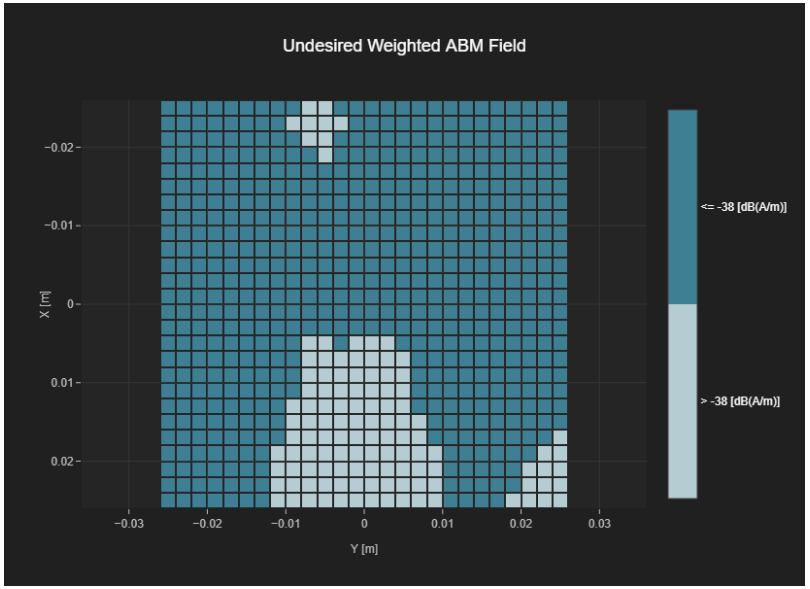
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 4	UMTS-FDD (WCDMA)	1413	1732.6

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

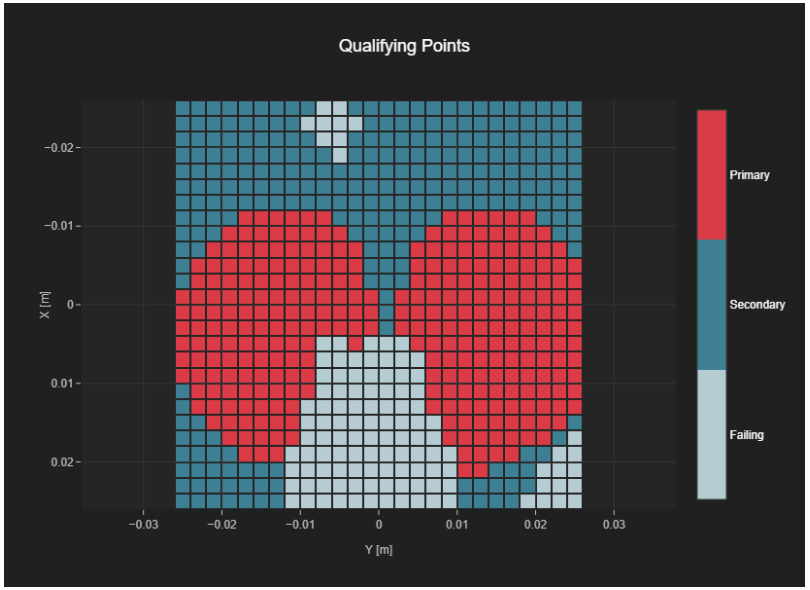
Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse	Hmax [dB(A/m)]
558	26	26	-27.08


Undesired Weighted ABM Field
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
<= -38 [dB(A/m)]
> -38 [dB(A/m)]

T-Coil Coupling Mode Test Report

Results

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
296	558	26	26



T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 13:26

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

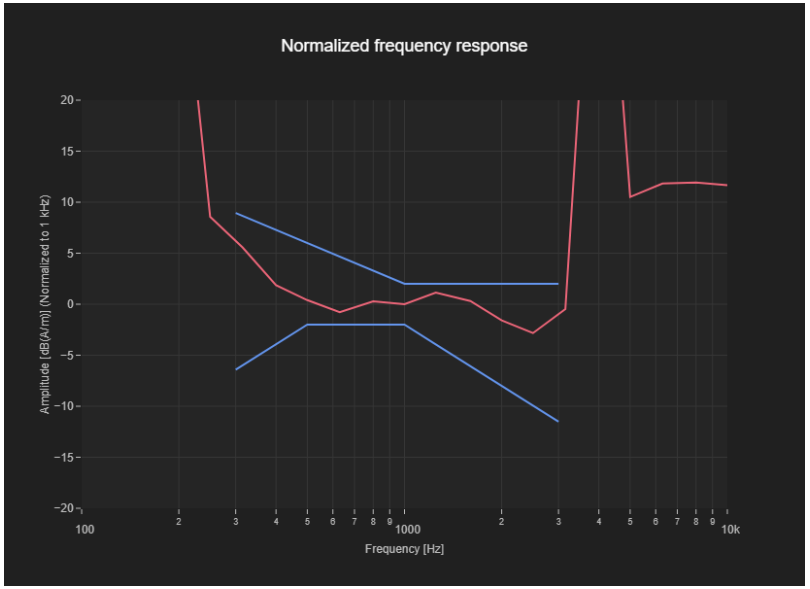
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 4	UMTS-FDD (WCDMA)	1413	1732.6

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Margin Upper Bound [dB]	Margin Lower Bound [dB]
48k_voice_300-3000_2s.wav	2.0	0.87	1.22


Normalized frequency response
Amplitude [dB(A/m)] (Normalized to 1 kHz)
20
15
10
5
0
−5
−10
−15
−20
100
2
3
4
5
6
7
8
9
1000
2
3
4
5
6
7
8
9
10k
Frequency [Hz]

T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 11:13

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

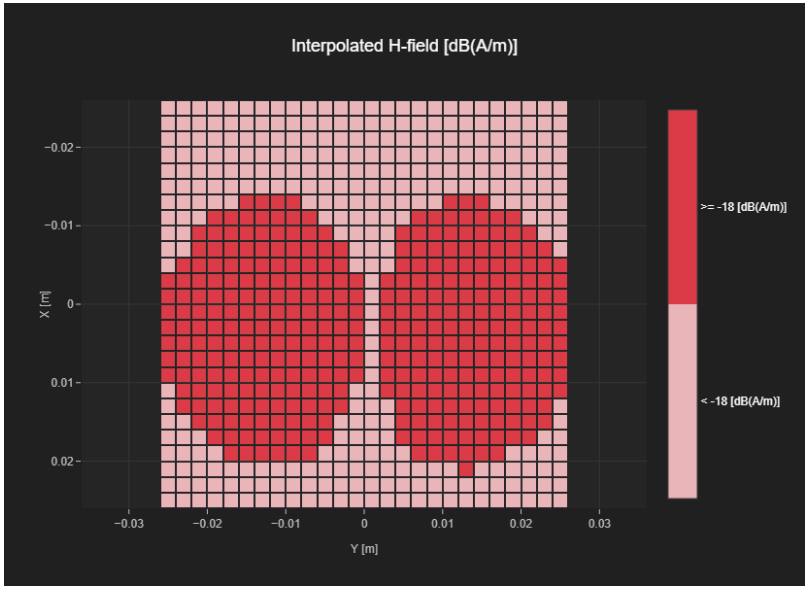
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 5	UMTS-FDD (WCDMA)	4182	836.4

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Gain [dB]	Hmax [dB(A/m)]
48k_voice_1kHz_1s.wav	2.0	-12.02	-5.91


Interpolated H-field [dB(A/m)]
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
>= -18 [dB(A/m)]
< -18 [dB(A/m)]

T-Coil Noise Test Report

Measurement performed on May 30, 2025 at 11:26

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

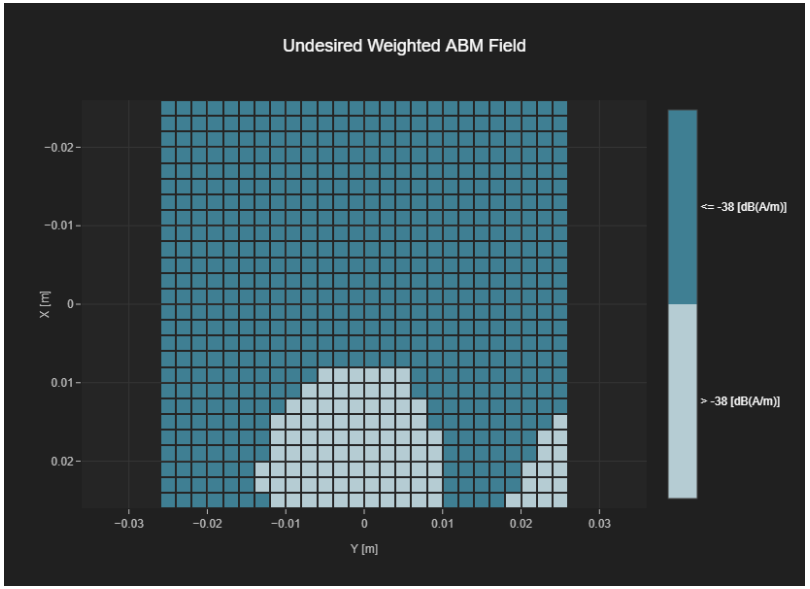
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 5	UMTS-FDD (WCDMA)	4182	836.4

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

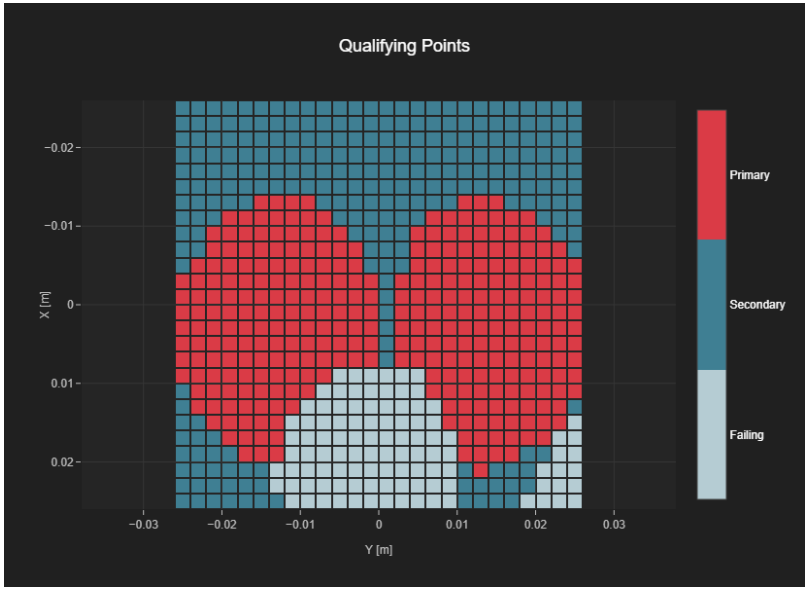
Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse	Hmax [dB(A/m)]
572	26	26	-27.47


Undesired Weighted ABM Field
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
<= -38 [dB(A/m)]
> -38 [dB(A/m)]

T-Coil Coupling Mode Test Report

Results

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
315	572	26	26



T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 11:13

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

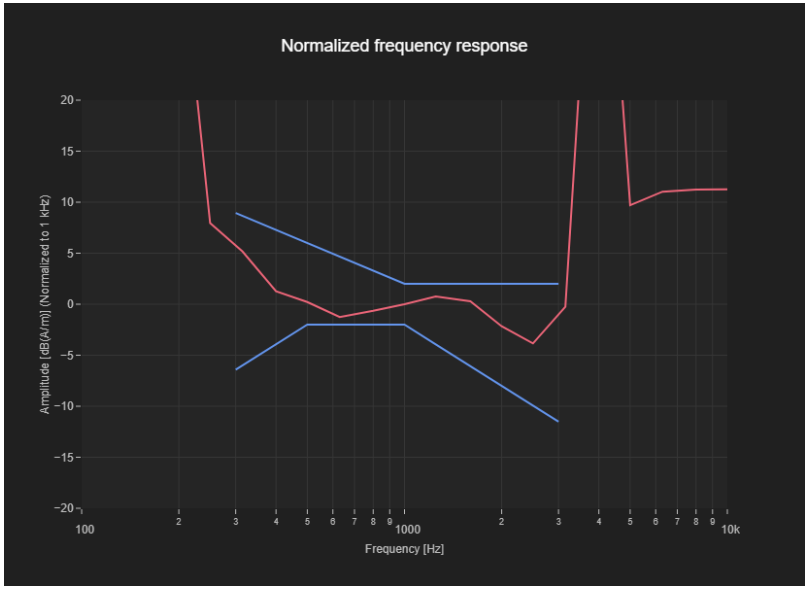
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 5	UMTS-FDD (WCDMA)	4182	836.4

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Margin Upper Bound [dB]	Margin Lower Bound [dB]
48k_voice_300-3000_2s.wav	2.0	1.25	0.74


Normalized frequency response
Amplitude [dB(A/m)] (Normalized to 1 kHz)
20
15
10
5
0
−5
−10
−15
−20
100
2
3
4
5
6
7
8
9
1000
2
3
4
5
6
7
8
9
10k
Frequency [Hz]

T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 14:20

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

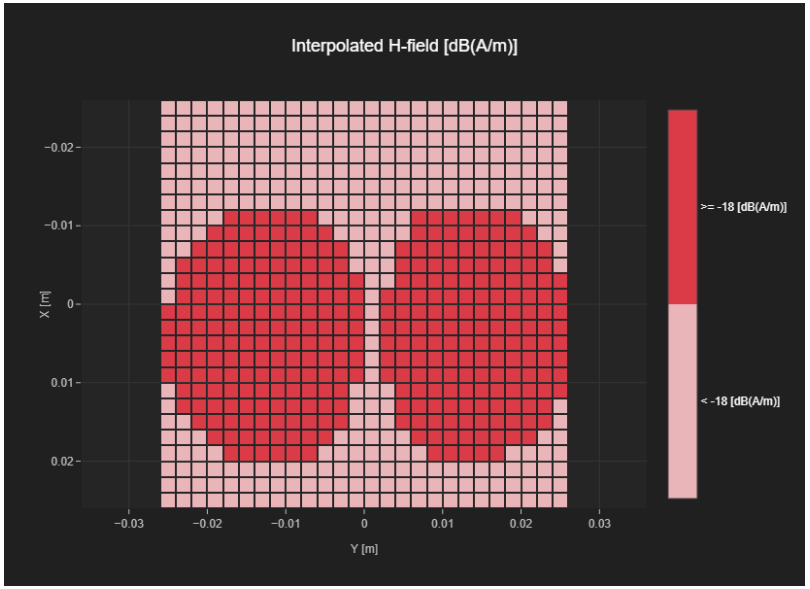
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 12	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	23095	707.5

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Gain [dB]	Hmax [dB(A/m)]
48k_voice_1kHz_1s.wav	2.0	-12.02	-6.07


Interpolated H-field [dB(A/m)]
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
>= -18 [dB(A/m)]
< -18 [dB(A/m)]

T-Coil Noise Test Report

Measurement performed on May 30, 2025 at 14:30

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

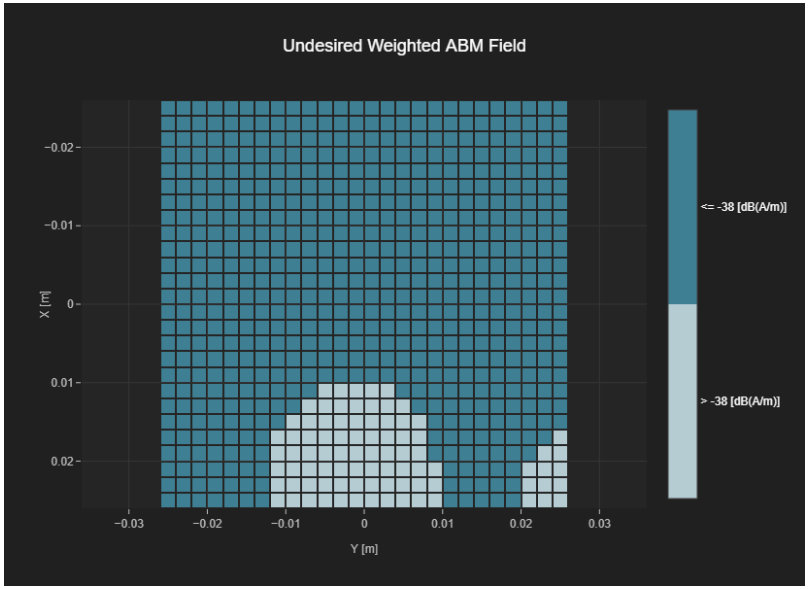
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 12	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	23095	707.5

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

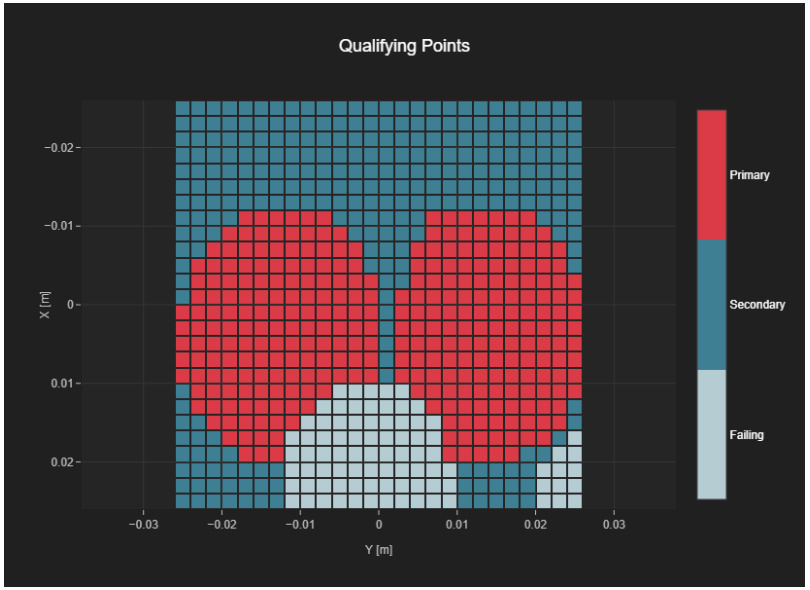
Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse	Hmax [dB(A/m)]
590	26	26	-28.72


Undesired Weighted ABM Field
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
<= -38 [dB(A/m)]
> -38 [dB(A/m)]

T-Coil Coupling Mode Test Report

Results

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
312	590	26	26



T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 14:20

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

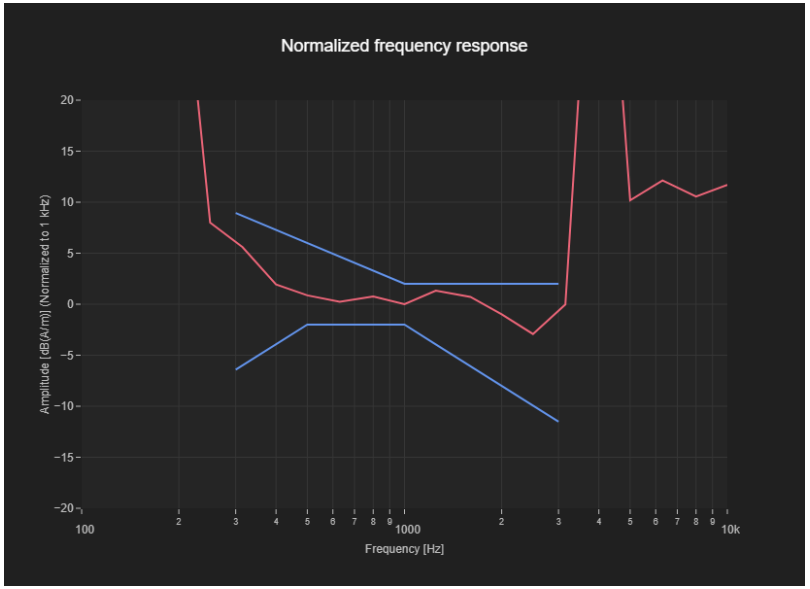
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 12	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	23095	707.5

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Margin Upper Bound [dB]	Margin Lower Bound [dB]
48k_voice_300-3000_2s.wav	2.0	0.66	2.0


Normalized frequency response
Amplitude [dB(A/m)] (Normalized to 1 kHz)
20
15
10
5
0
−5
−10
−15
−20
100
2
3
4
5
6
7
8
9
1000
2
3
4
5
6
7
8
9
10k
Frequency [Hz]

T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 16:00

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

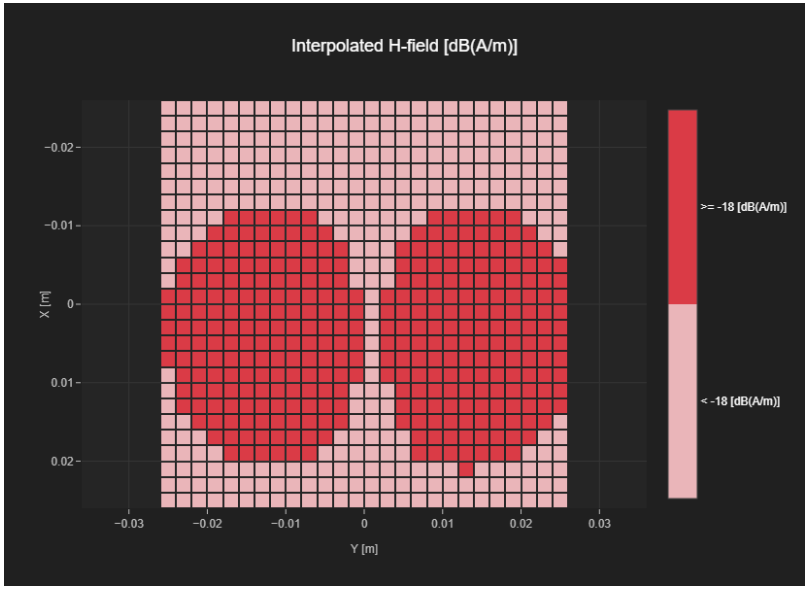
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 25	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	26365	1882.5

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Gain [dB]	Hmax [dB(A/m)]
48k_voice_1kHz_1s.wav	2.0	-12.02	-6.06


Interpolated H-field [dB(A/m)]
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
>= -18 [dB(A/m)]
< -18 [dB(A/m)]

T-Coil Noise Test Report

Measurement performed on May 30, 2025 at 16:10

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

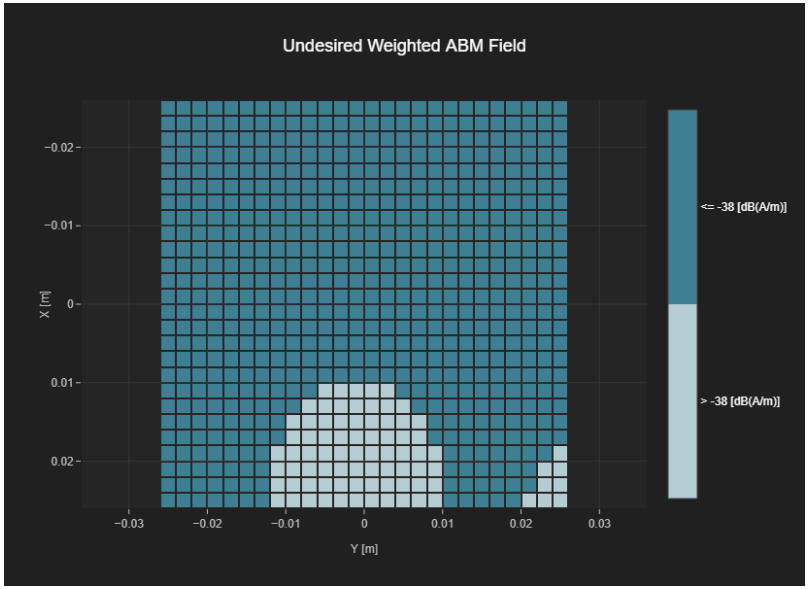
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 25	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	26365	1882.5

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

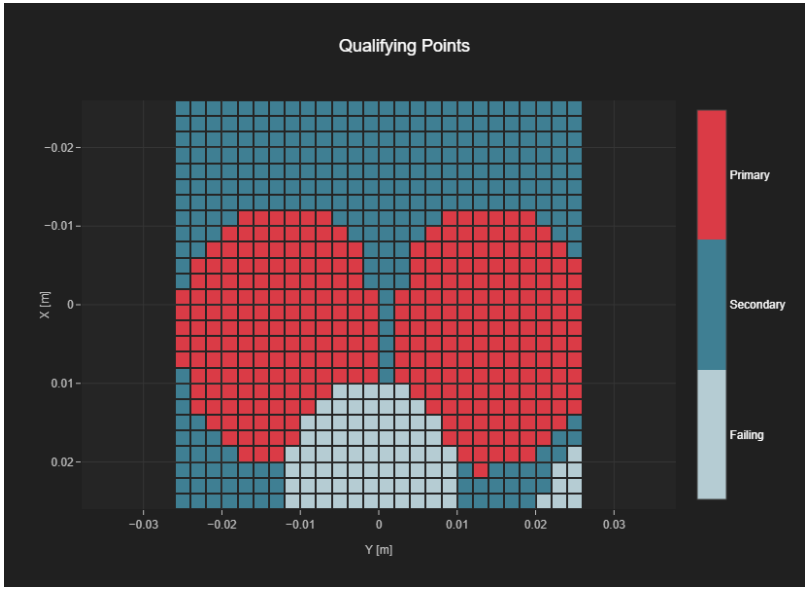
Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse	Hmax [dB(A/m)]
594	26	26	-28.98


Undesired Weighted ABM Field
X [m]
−0.02
−0.01
0
0.01
0.02
Y [m]
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
<= -38 [dB(A/m)]
> -38 [dB(A/m)]

T-Coil Coupling Mode Test Report

Results

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
314	594	26	26



T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 16:00

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

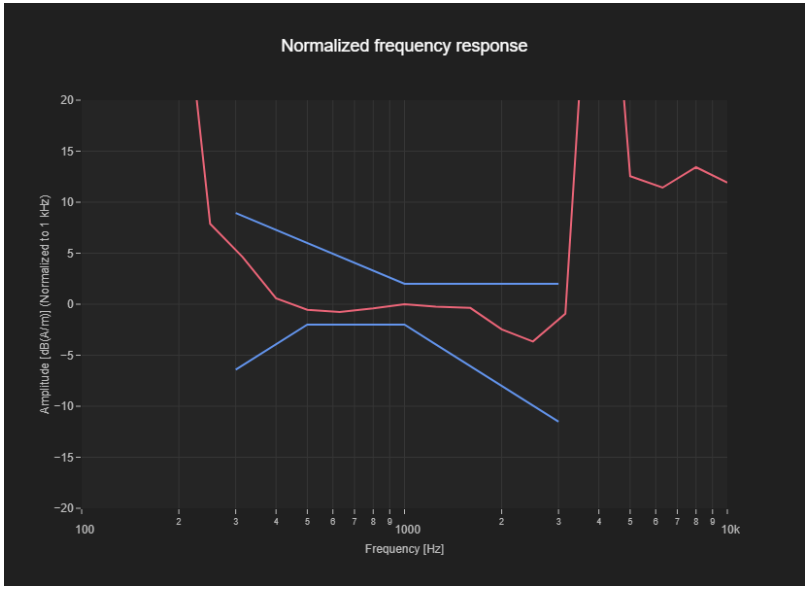
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 25	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	26365	1882.5

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Margin Upper Bound [dB]	Margin Lower Bound [dB]
48k_voice_300-3000_2s.wav	2.0	2.0	1.25


Normalized frequency response
Amplitude [dB(A/m)] (Normalized to 1 kHz)
20
15
10
5
0
−5
−10
−15
−20
100
2
3
4
5
6
7
8
9
1000
2
3
4
5
6
7
8
9
10k
Frequency [Hz]

T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 16:28

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

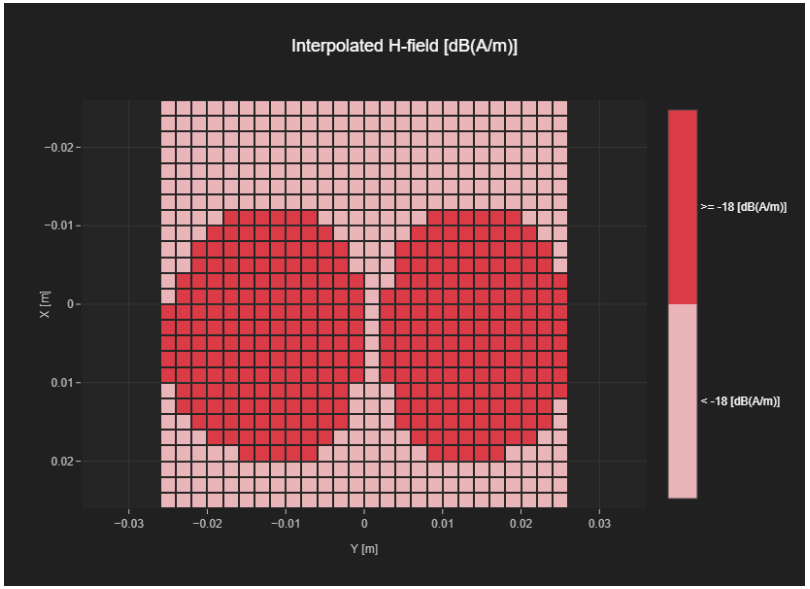
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 26	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	26865	831.5

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Gain [dB]	Hmax [dB(A/m)]
48k_voice_1kHz_1s.wav	2.0	-12.02	-5.98


Interpolated H-field [dB(A/m)]
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
>= -18 [dB(A/m)]
< -18 [dB(A/m)]

T-Coil Noise Test Report

Measurement performed on May 30, 2025 at 16:38

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

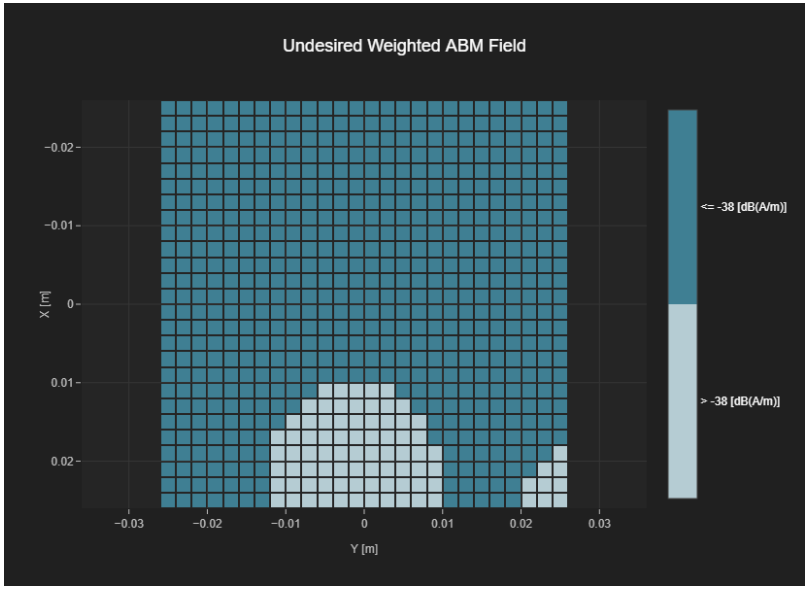
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 26	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	26865	831.5

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

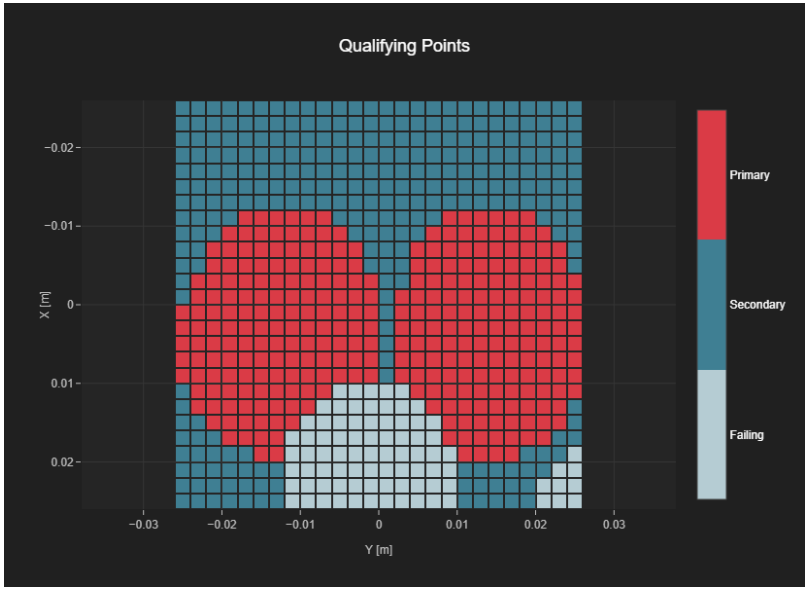
Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse	Hmax [dB(A/m)]
592	26	26	-28.53


Undesired Weighted ABM Field
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
<= -38 [dB(A/m)]
> -38 [dB(A/m)]

T-Coil Coupling Mode Test Report

Results

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
308	592	26	26



T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 16:28

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

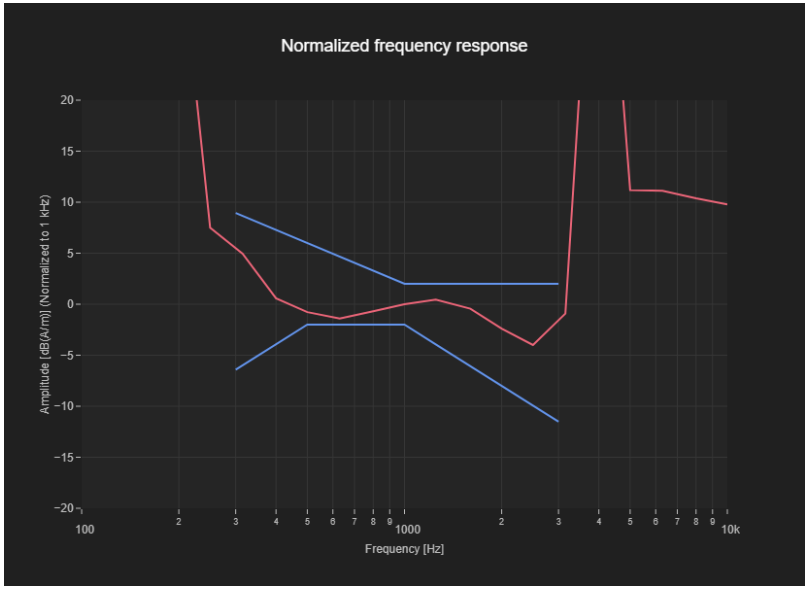
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 26	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	26865	831.5

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Margin Upper Bound [dB]	Margin Lower Bound [dB]
48k_voice_300-3000_2s.wav	2.0	1.55	0.6


Normalized frequency response
Amplitude [dB(A/m)] (Normalized to 1 kHz)
20
15
10
5
0
−5
−10
−15
−20
100
2
3
4
5
6
7
8
9
1000
2
3
4
5
6
7
8
9
10k
Frequency [Hz]

T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 17:07

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

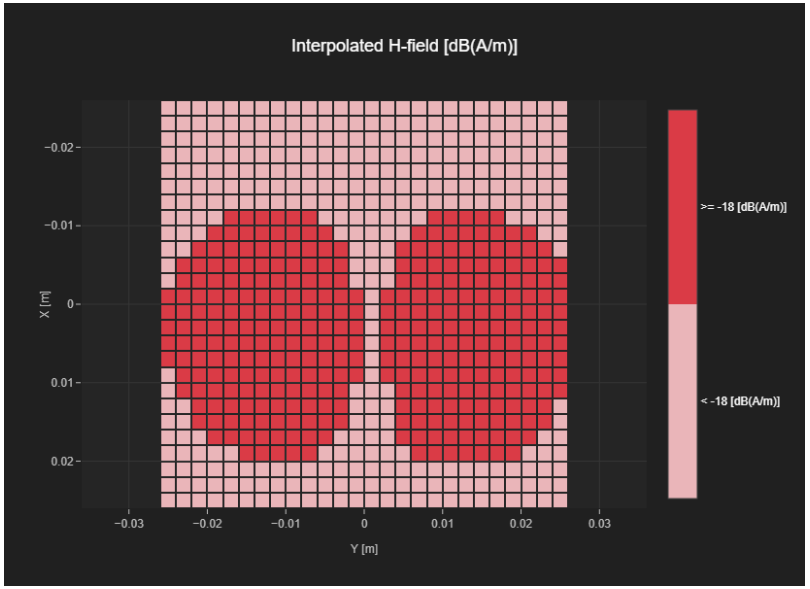
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 66	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	132322	1745.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Gain [dB]	Hmax [dB(A/m)]
48k_voice_1kHz_1s.wav	2.0	-12.02	-6.17


Interpolated H-field [dB(A/m)]
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
>= -18 [dB(A/m)]
< -18 [dB(A/m)]

T-Coil Noise Test Report

Measurement performed on May 30, 2025 at 19:35

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

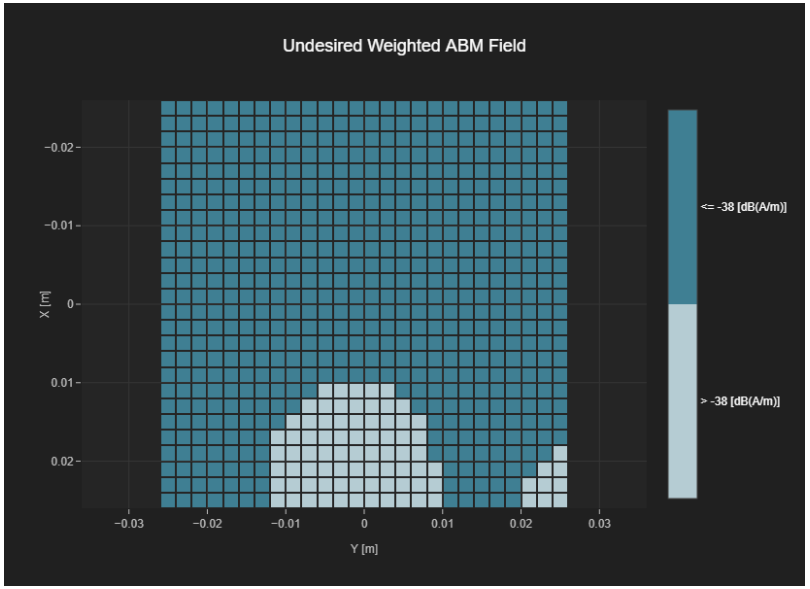
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 66	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	132322	1745.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

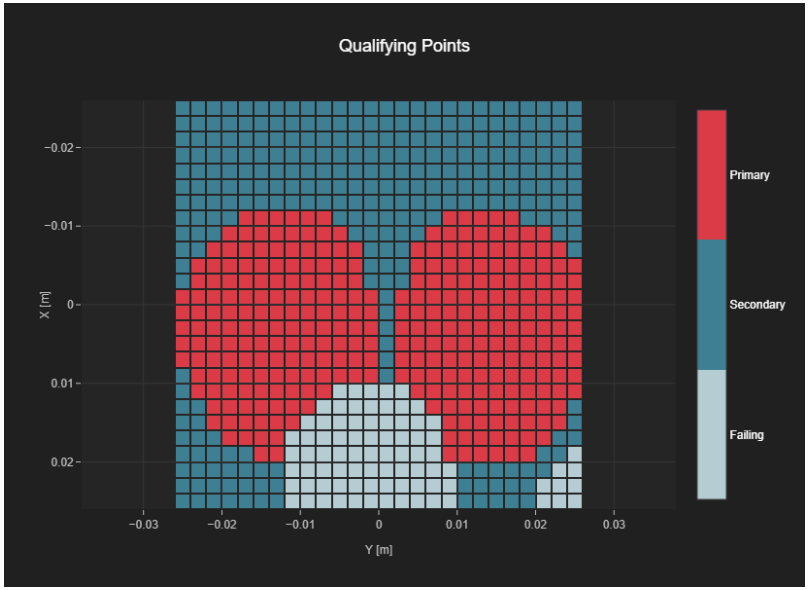
Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse	Hmax [dB(A/m)]
593	26	26	-28.51


Undesired Weighted ABM Field
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
<= -38 [dB(A/m)]
> -38 [dB(A/m)]

T-Coil Coupling Mode Test Report

Results

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
309	593	26	26



T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 17:07

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

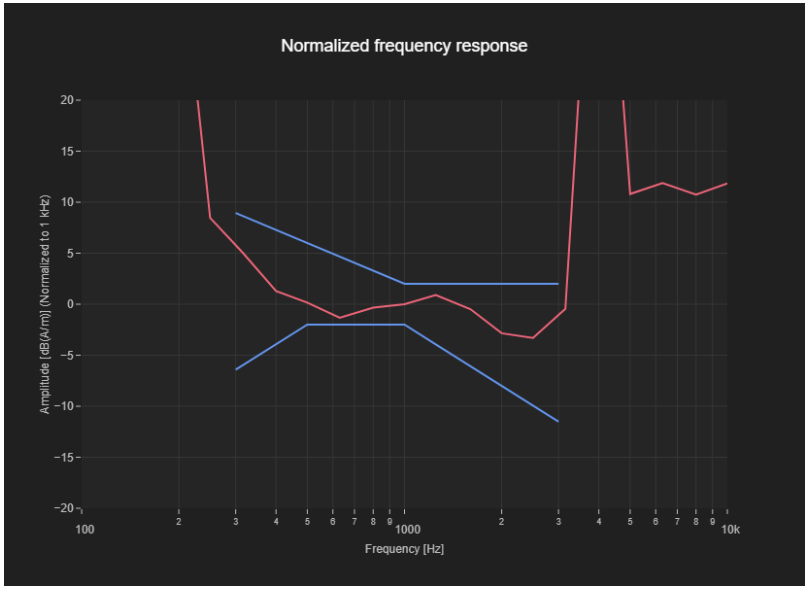
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 66	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	132322	1745.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Margin Upper Bound [dB]	Margin Lower Bound [dB]
48k_voice_300-3000_2s.wav	2.0	1.1	0.68


Normalized frequency response
Amplitude [dB(A/m)] (Normalized to 1 kHz)
20
15
10
5
0
−5
−10
−15
−20
100
2
3
4
5
6
7
8
9
1000
2
3
4
5
6
7
8
9
10k
Frequency [Hz]

T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 19:57

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

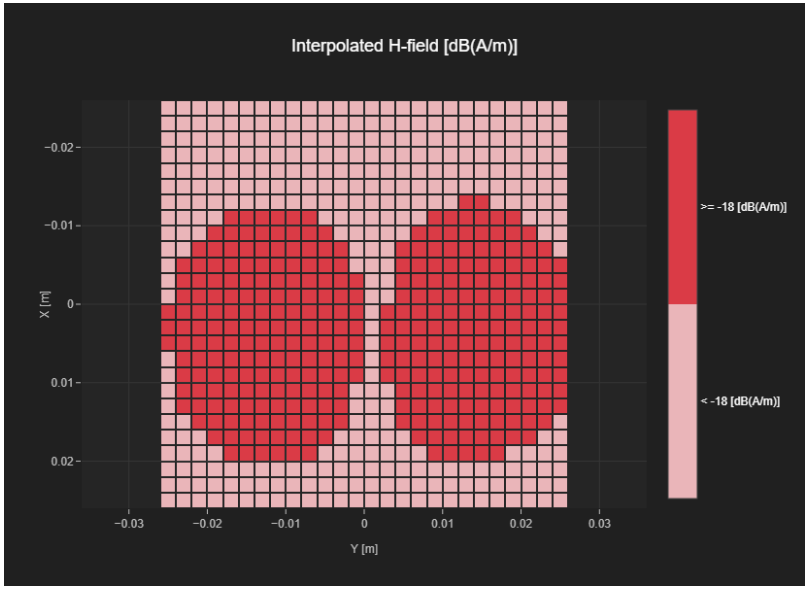
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 71	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	133322	683.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Gain [dB]	Hmax [dB(A/m)]
48k_voice_1kHz_1s.wav	2.0	-12.02	-6.43


Interpolated H-field [dB(A/m)]
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
>= -18 [dB(A/m)]
< -18 [dB(A/m)]

T-Coil Noise Test Report

Measurement performed on May 30, 2025 at 20:09

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

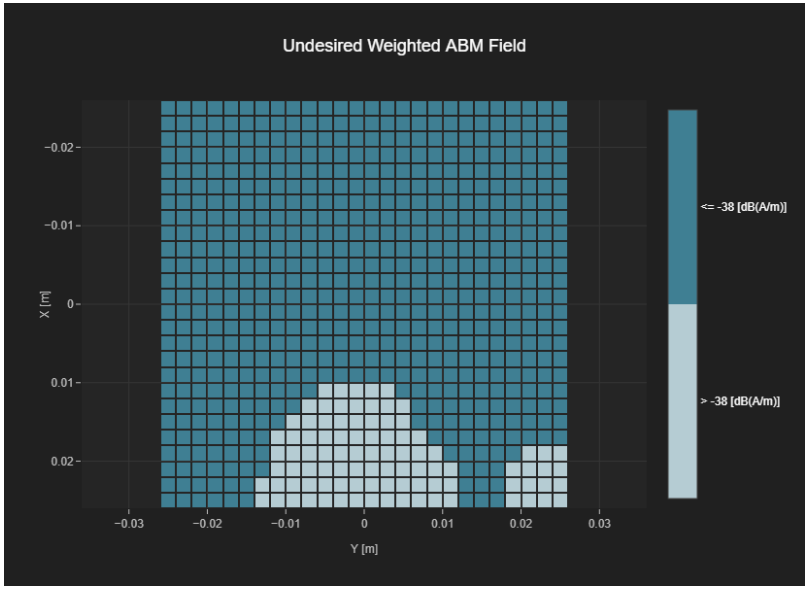
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 71	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	133322	683.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

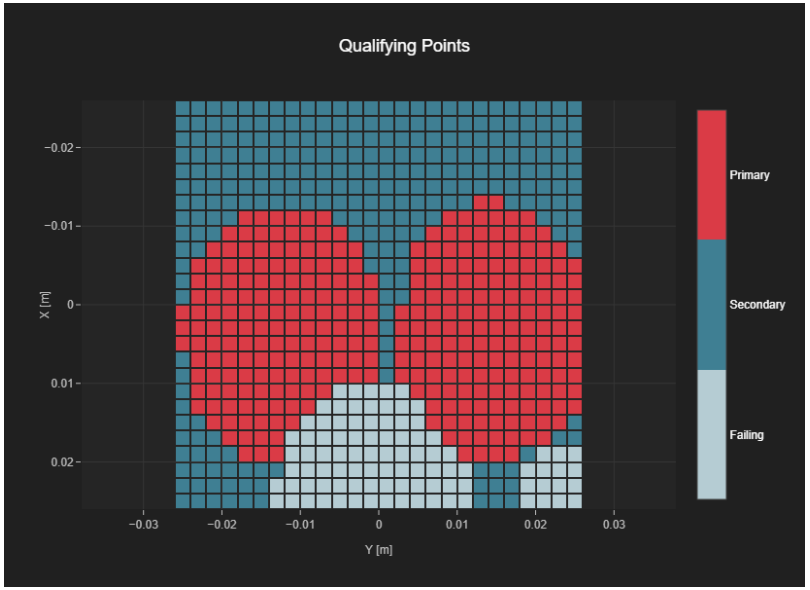
Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse	Hmax [dB(A/m)]
582	26	26	-25.58


Undesired Weighted ABM Field
X [m]
−0.02
−0.01
0
0.01
0.02
Y [m]
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
<= -38 [dB(A/m)]
> -38 [dB(A/m)]

T-Coil Coupling Mode Test Report

Results

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
312	582	26	26



T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 19:57

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

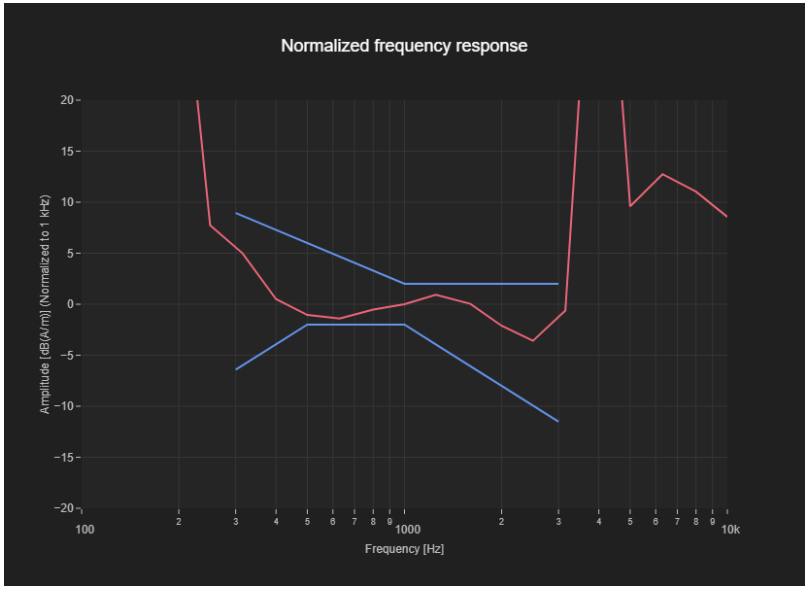
Band Name	Communication Systems Name	Channel	Frequency [MHz]
Band 71	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	133322	683.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Margin Upper Bound [dB]	Margin Lower Bound [dB]
48k_voice_300-3000_2s.wav	2.0	1.08	0.6


Normalized frequency response
Amplitude [dB(A/m)] (Normalized to 1 kHz)
20
15
10
5
0
−5
−10
−15
−20
100
2
3
4
5
6
7
8
9
1000
2
3
4
5
6
7
8
9
10k
Frequency [Hz]

T-Coil Signal Test Report

Measurement performed on May 29, 2025 at 21:08

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

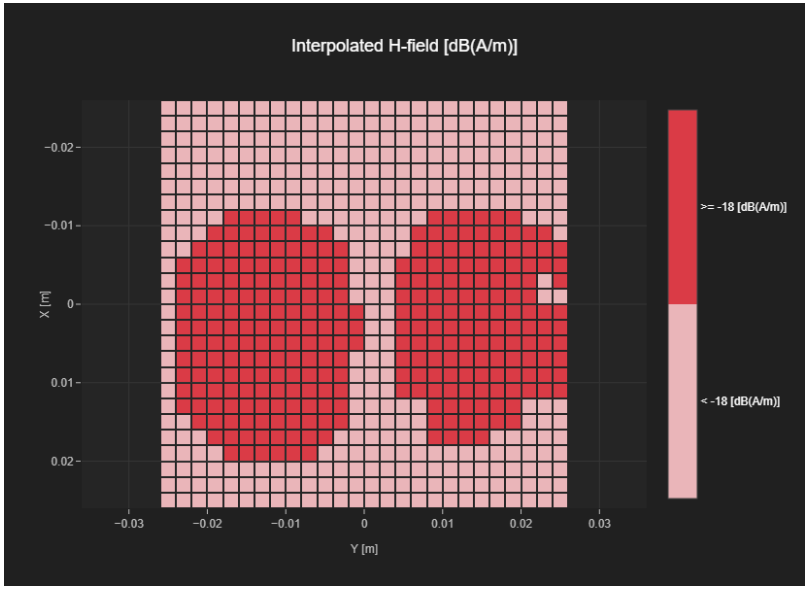
Band Name	Communication Systems Name	Channel	Frequency [MHz]
WLAN 2.4GHz	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	7	2442.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Gain [dB]	Hmax [dB(A/m)]
48k_voice_1kHz_1s.wav	2.0	-12.02	-7.34


Interpolated H-field [dB(A/m)]
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
>= -18 [dB(A/m)]
< -18 [dB(A/m)]

T-Coil Noise Test Report

Measurement performed on May 29, 2025 at 21:18

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

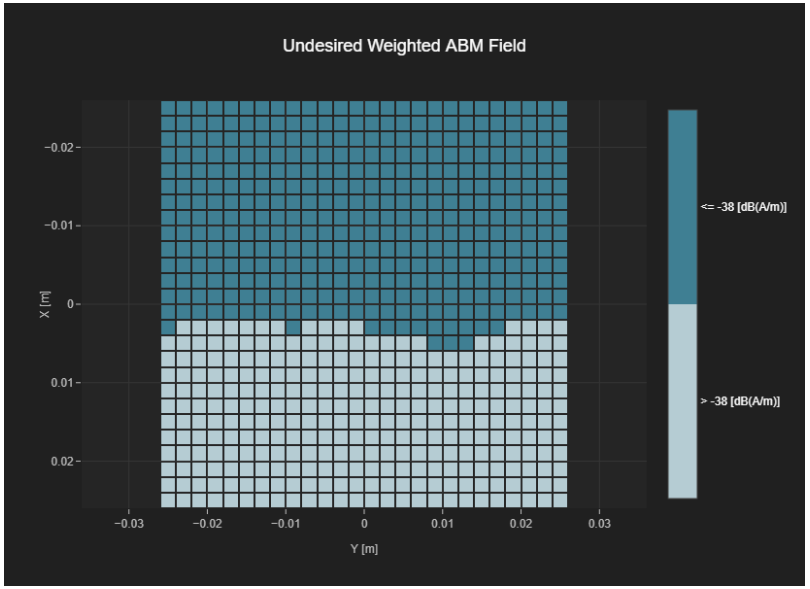
Band Name	Communication Systems Name	Channel	Frequency [MHz]
WLAN 2.4GHz	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	7	2442.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

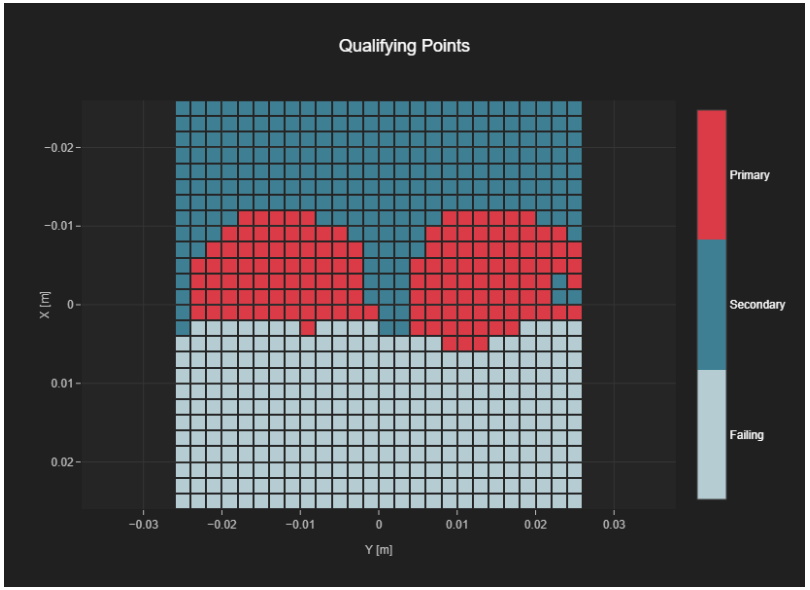
Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse	Hmax [dB(A/m)]
378	16	26	-23.1


Undesired Weighted ABM Field
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
<= -38 [dB(A/m)]
> -38 [dB(A/m)]

T-Coil Coupling Mode Test Report

Results

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
145	378	16	26



T-Coil Signal Test Report

Measurement performed on May 29, 2025 at 21:08

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

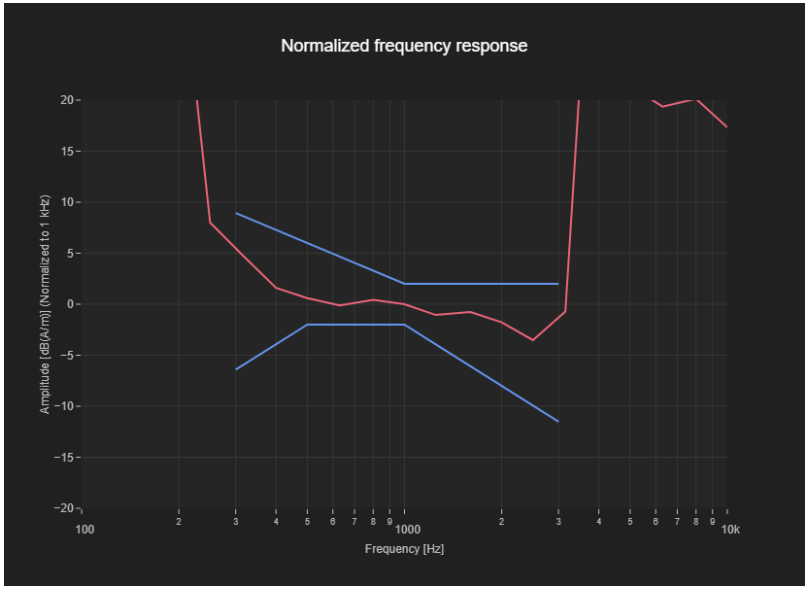
Band Name	Communication Systems Name	Channel	Frequency [MHz]
WLAN 2.4GHz	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	7	2442.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Margin Upper Bound [dB]	Margin Lower Bound [dB]
48k_voice_300-3000_2s.wav	2.0	2.0	1.87


Normalized frequency response
Amplitude [dB(A/m)] (Normalized to 1 kHz)
20
15
10
5
0
−5
−10
−15
−20
100
2
3
4
5
6
7
8
9
1000
2
3
4
5
6
7
8
9
10k
Frequency [Hz]

T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 20:27

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

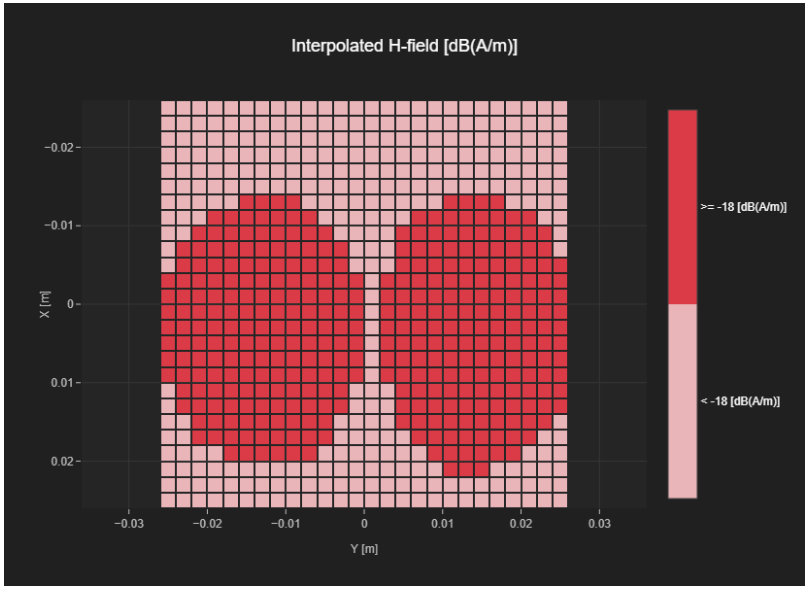
Band Name	Communication Systems Name	Channel	Frequency [MHz]
WLAN 2.4GHz	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	7	2442.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Gain [dB]	Hmax [dB(A/m)]
48k_voice_1kHz_1s.wav	2.0	-12.02	-6.02


Interpolated H-field [dB(A/m)]
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
>= -18 [dB(A/m)]
< -18 [dB(A/m)]

T-Coil Noise Test Report

Measurement performed on May 30, 2025 at 20:39

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

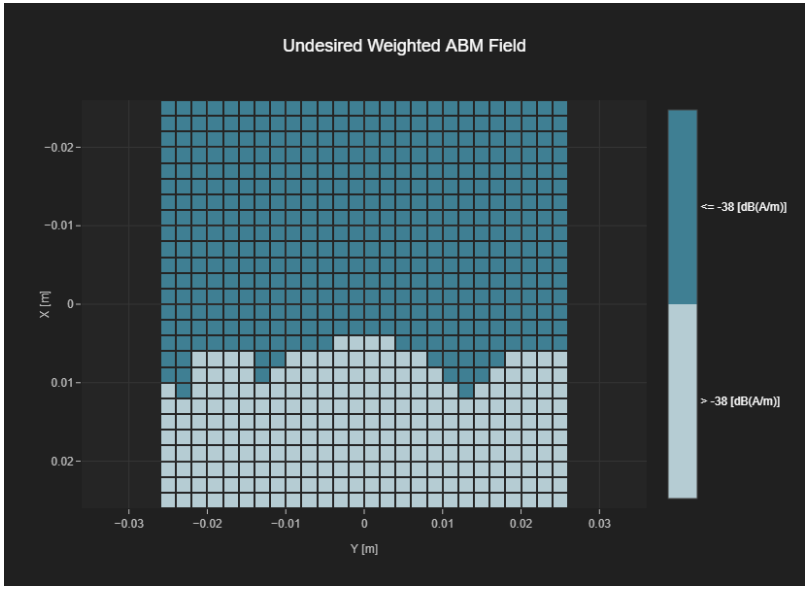
Band Name	Communication Systems Name	Channel	Frequency [MHz]
WLAN 2.4GHz	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	7	2442.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

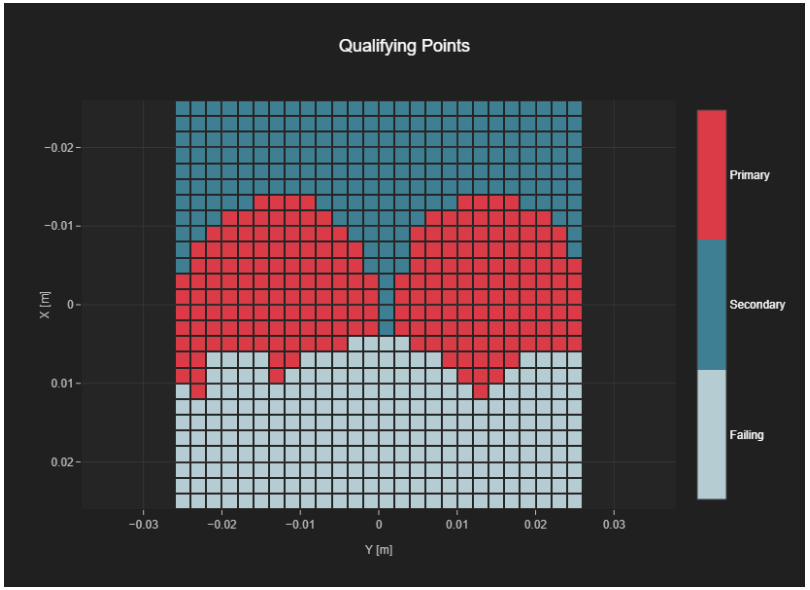
Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse	Hmax [dB(A/m)]
429	19	26	-24.26


Undesired Weighted ABM Field
X [m]
−0.02
−0.01
0
0.01
0.02
Y [m]
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
<= -38 [dB(A/m)]
> -38 [dB(A/m)]

T-Coil Coupling Mode Test Report

Results

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
224	429	19	26



T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 20:27

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

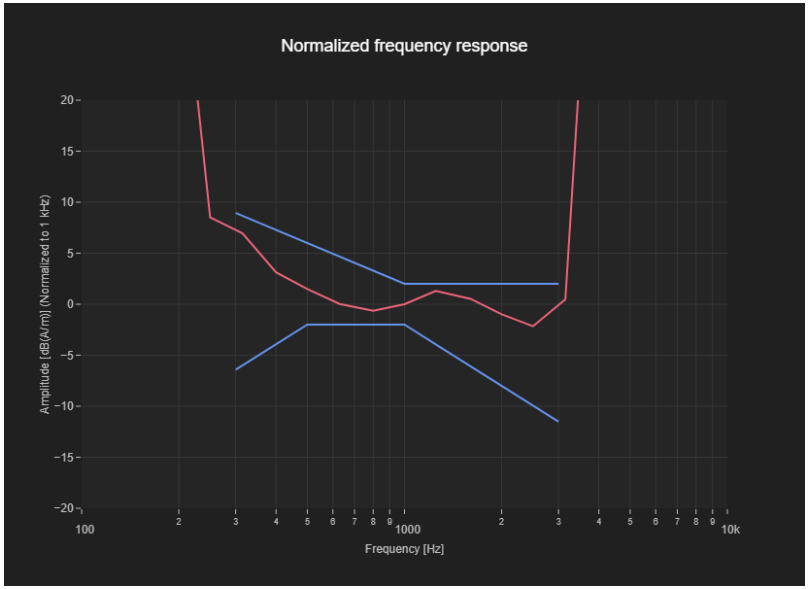
Band Name	Communication Systems Name	Channel	Frequency [MHz]
WLAN 2.4GHz	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	7	2442.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Margin Upper Bound [dB]	Margin Lower Bound [dB]
48k_voice_300-3000_2s.wav	2.0	-3.13	2.0


Normalized frequency response
Amplitude [dB(A/m)] (Normalized to 1 kHz)
20
15
10
5
0
−5
−10
−15
−20
100
2
3
4
5
6
7
8
9
1000
2
3
4
5
6
7
8
9
10k
Frequency [Hz]

T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 21:02

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

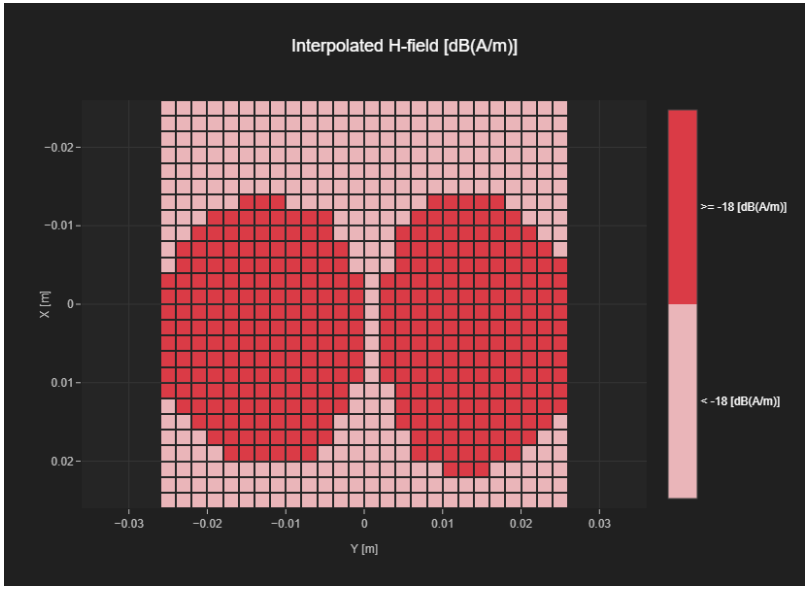
Band Name	Communication Systems Name	Channel	Frequency [MHz]
WLAN 2.4GHz	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	7	2442.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Gain [dB]	Hmax [dB(A/m)]
48k_voice_1kHz_1s.wav	2.0	-12.02	-5.85


Interpolated H-field [dB(A/m)]
X [m]
Y [m]
−0.02
−0.01
0
0.01
0.02
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
>= -18 [dB(A/m)]
< -18 [dB(A/m)]

T-Coil Noise Test Report

Measurement performed on May 30, 2025 at 21:14

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

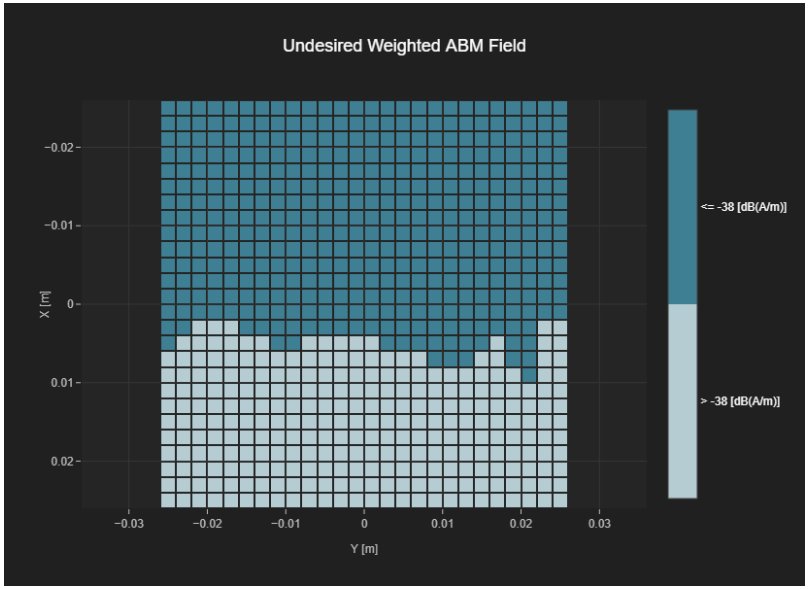
Band Name	Communication Systems Name	Channel	Frequency [MHz]
WLAN 2.4GHz	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	7	2442.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

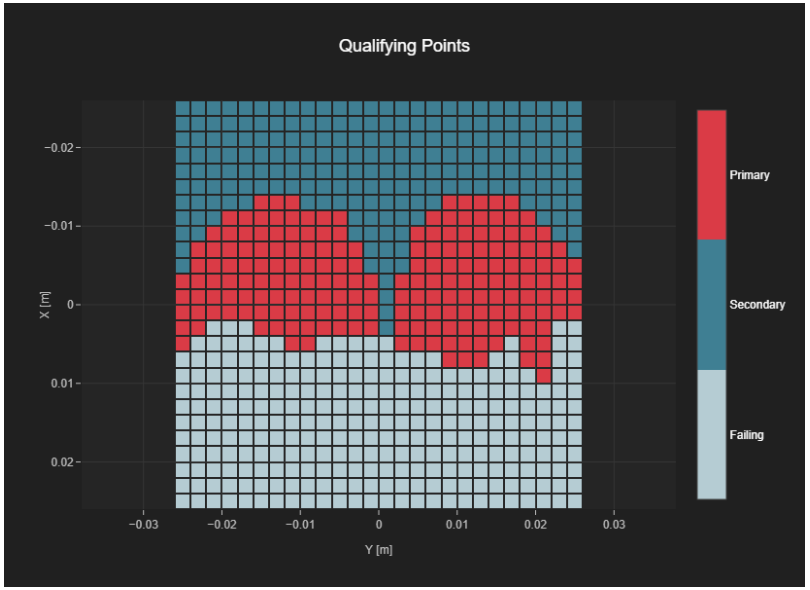
Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse	Hmax [dB(A/m)]
403	18	26	-15.9


Undesired Weighted ABM Field
X [m]
−0.02
−0.01
0
0.01
0.02
Y [m]
−0.03
−0.02
−0.01
0
0.01
0.02
0.03
<= -38 [dB(A/m)]
> -38 [dB(A/m)]

T-Coil Coupling Mode Test Report

Results

Primary Group Contiguous Point Count	Secondary Group Point Count	Secondary Group Max Longitudinal	Secondary Group Max Transverse
197	403	18	26



T-Coil Signal Test Report

Measurement performed on May 30, 2025 at 21:02

Device Under Test

Manufacturer	Model	Dimensions [mm]	Speaker Position [mm]
		146.2 x 71.8 x 7.5	144.3

Hardware Setup

Probe Name	Probe Calibration Date	DAE Name	DAE Calibration Date
AM1DV3 - 1048	October 23, 2024	DAE4 Sn1643	March 21, 2025

Communication Systems

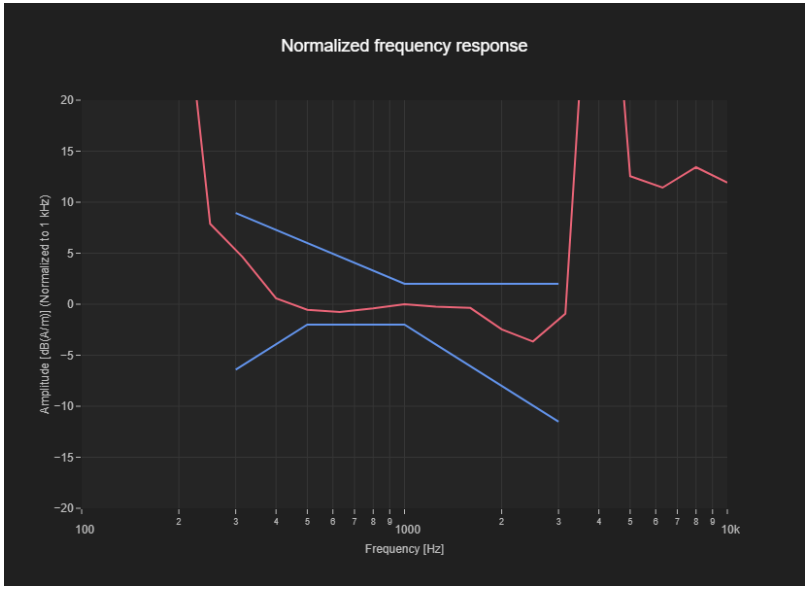
Band Name	Communication Systems Name	Channel	Frequency [MHz]
WLAN 2.4GHz	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	7	2442.0

Grid Settings

Extent X [mm]	Extent Y [mm]	Step X [mm]	Step Y [mm]	Distance [mm]
52.0	52.0	4.0	4.0	10.0

Results

Audio File	Measurement Duration [s]	Margin Upper Bound [dB]	Margin Lower Bound [dB]
48k_voice_300-3000_2s.wav	2.0	-2.51	2.0


Normalized frequency response
Amplitude [dB(A/m)] (Normalized to 1 kHz)
20
15
10
5
0
−5
−10
−15
−20
100
2
3
4
5
6
7
8
9
1000
2
3
4
5
6
7
8
9
10k
Frequency [Hz]