

# 24\_HAC T-coil\_FR1 n12\_15M\_QPSK\_1RB\_1Offset\_Ch141500

Measurement performed on March 21, 2024 at 00:48

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

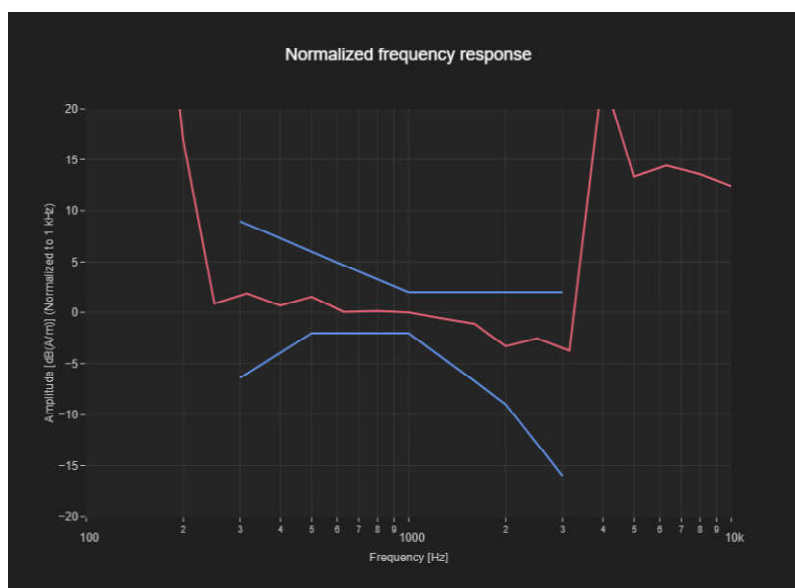
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| Band n12  | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz) | 141500  | 707.5           |

## 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

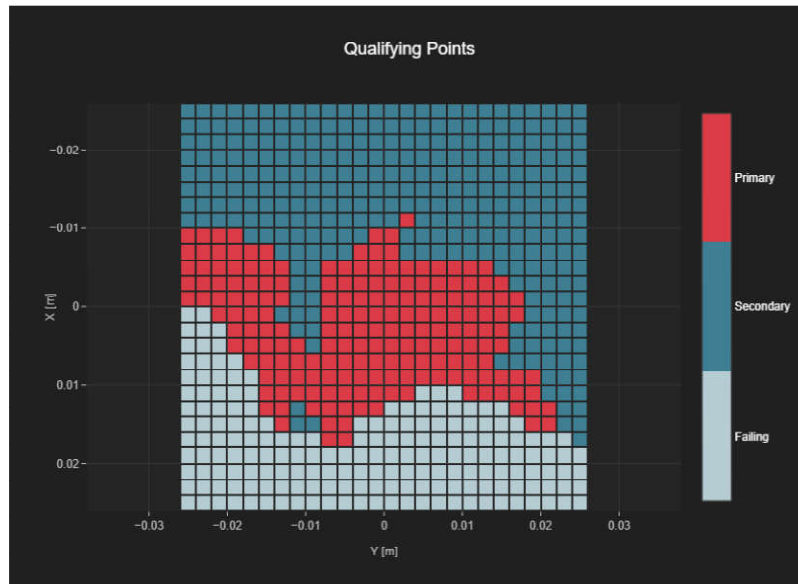
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 189                                  | 494                         | 22                               | 26                             |



# 25\_HAC T-coil\_FR1 n14\_10M\_QPSK\_1RB\_1Offset\_Ch158600

Measurement performed on March 21, 2024 at 01:41

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

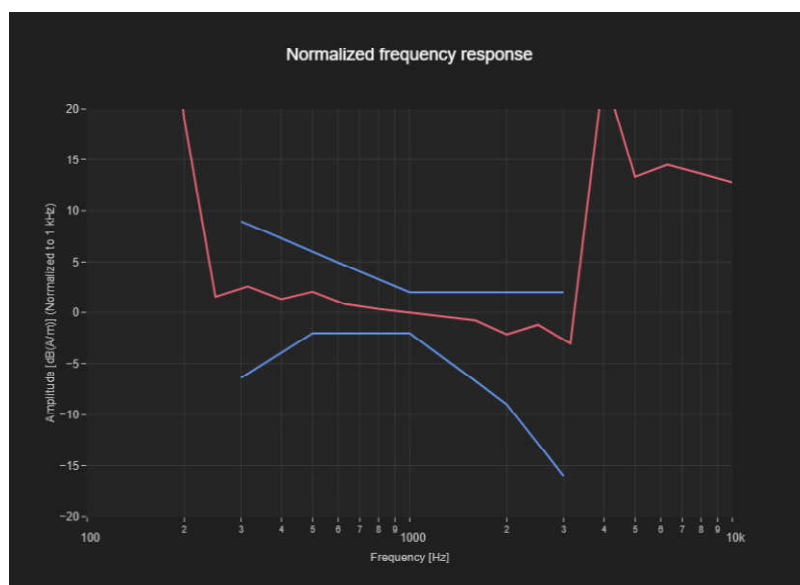
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| Band n14  | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz) | 158600  | 793.0           |

## 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

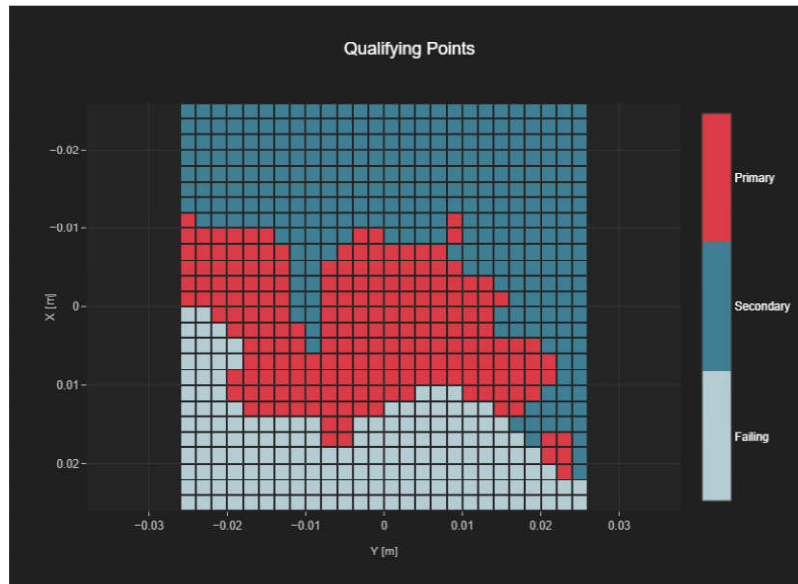
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 206                                  | 505                         | 24                               | 26                             |



# 26\_HAC T-coil\_FR1 n25\_40M\_QPSK\_1RB\_1Offset\_Ch376500

Measurement performed on March 21, 2024 at 02:16

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

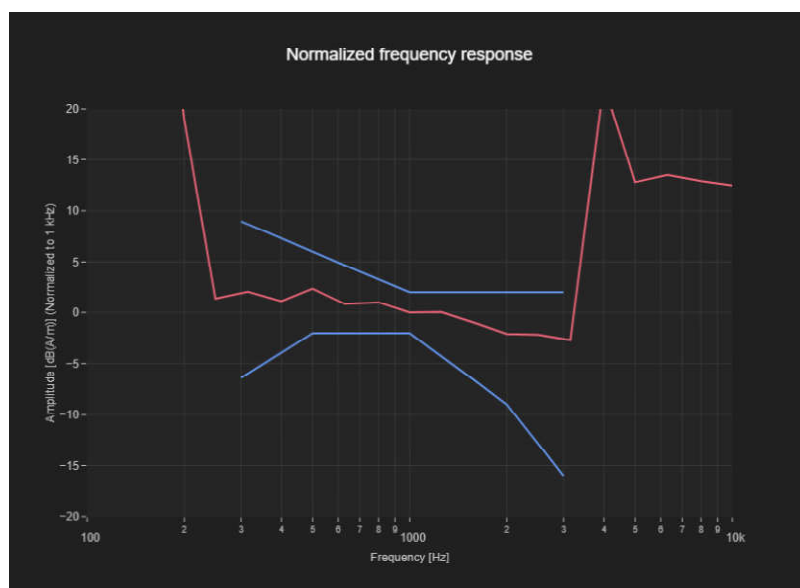
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| Band n25  | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) | 376500  | 1882.5          |

## 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

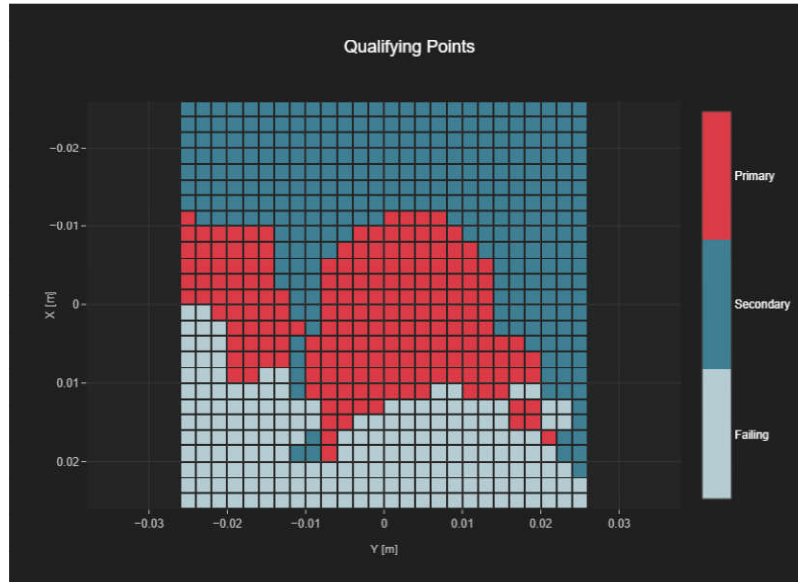
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 1.96                    | 2.0                     |



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 195                                  | 490                         | 24                               | 26                             |



# 27\_HAC T-coil\_FR1 n25\_40M\_QPSK\_1RB\_1Offset\_Ch376500

Measurement performed on March 25, 2024 at 23:39

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

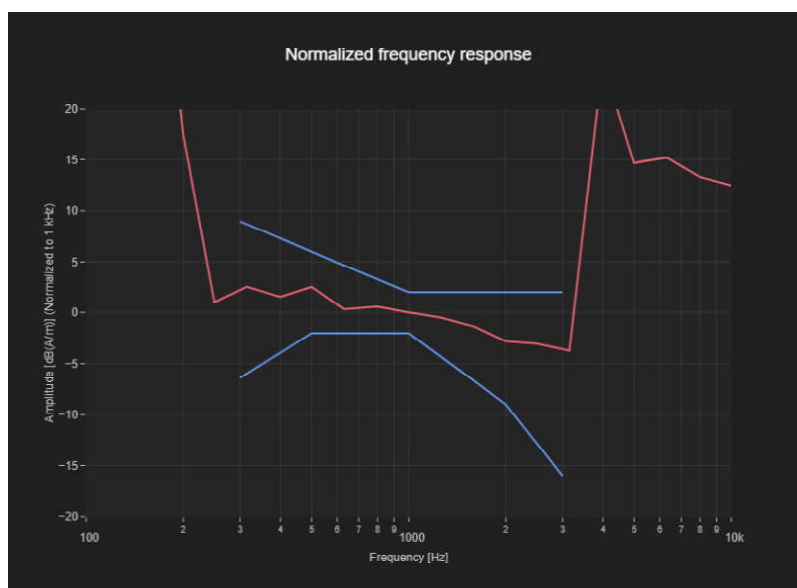
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| Band n25  | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) | 376500  | 1882.5          |

## 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

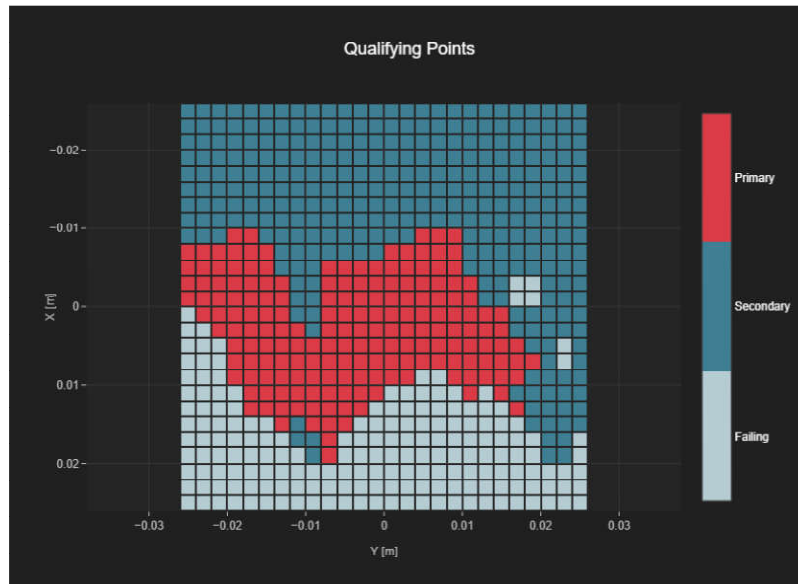
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 183                                  | 495                         | 23                               | 26                             |





# 28\_HAC T-coil\_FR1 n26\_20M\_QPSK\_1RB\_1Offset\_Ch166300

Measurement performed on March 21, 2024 at 02:59

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

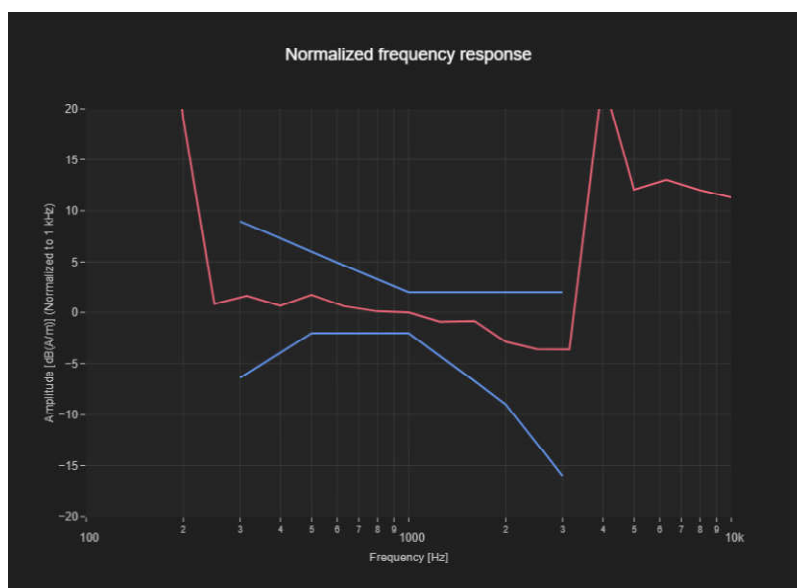
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| Band n26  | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz) | 166300  | 831.5           |

## 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

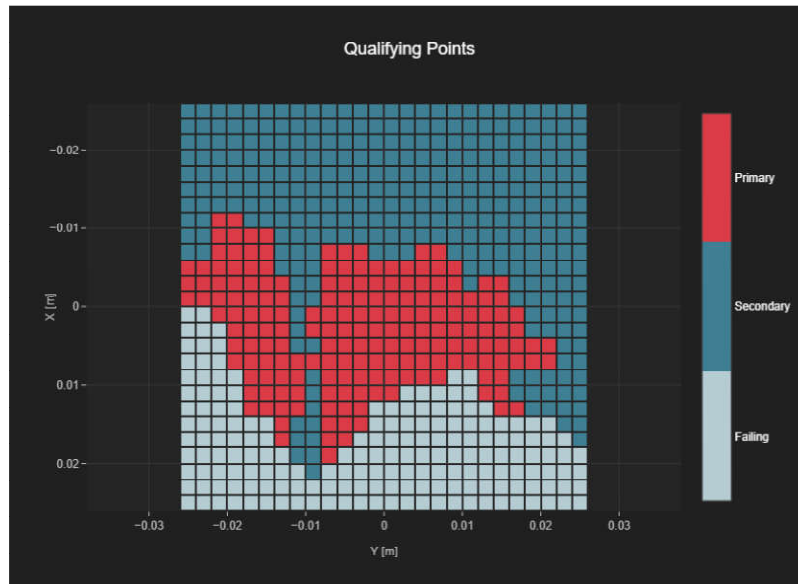
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 186                                  | 500                         | 24                               | 26                             |



# 29\_HAC T-coil\_FR1 n30\_10M\_QPSK\_1RB\_1Offset\_Ch462000

Measurement performed on March 21, 2024 at 05:13

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

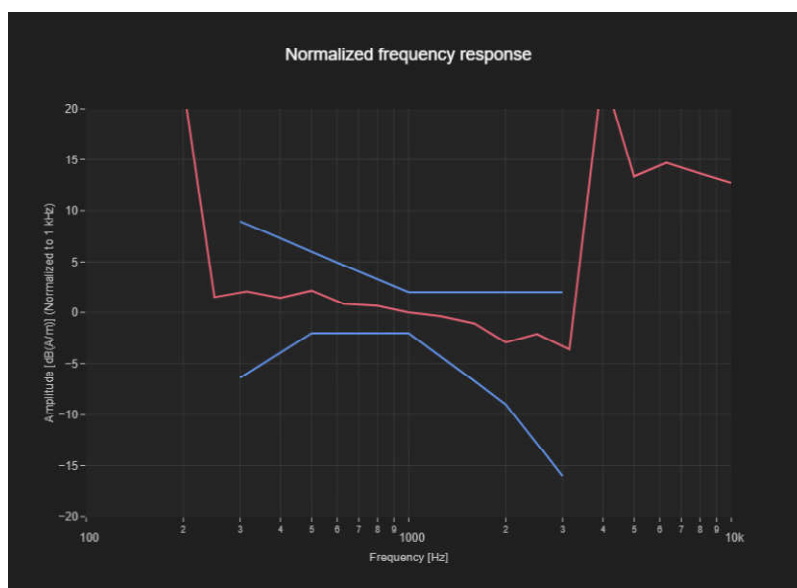
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| Band n30  | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz) | 462000  | 2310.0          |

## 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

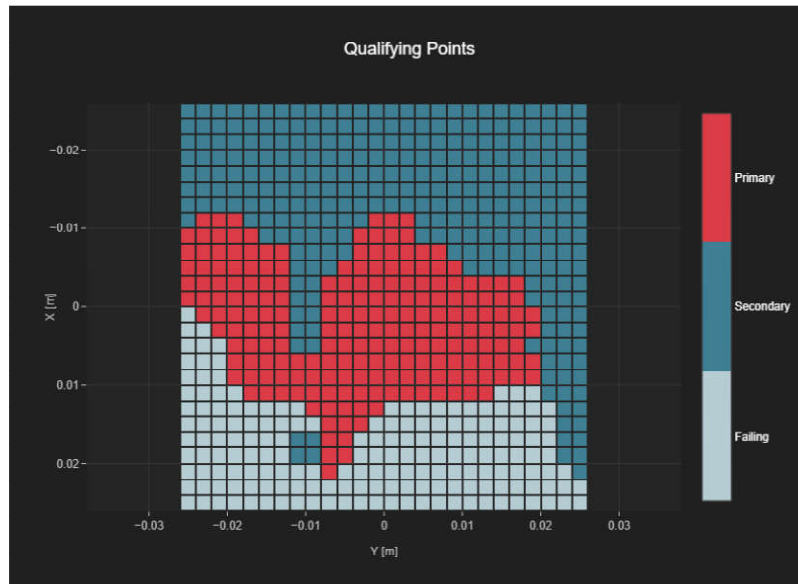
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 208                                  | 501                         | 24                               | 26                             |



# 30\_HAC T-coil\_FR1 n66\_40M\_QPSK\_1RB\_1Offset\_Ch349000

Measurement performed on March 26, 2024 at 00:33

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

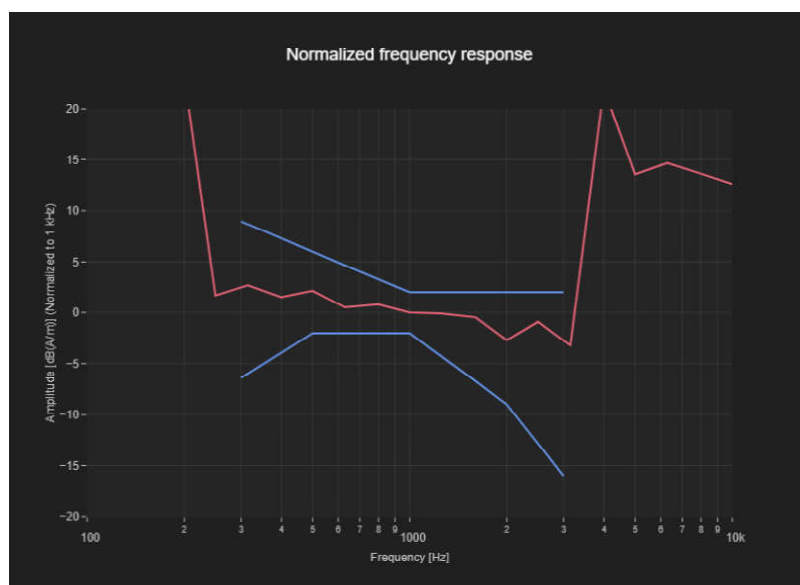
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| Band n66  | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) | 349000  | 1745.0          |

## 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

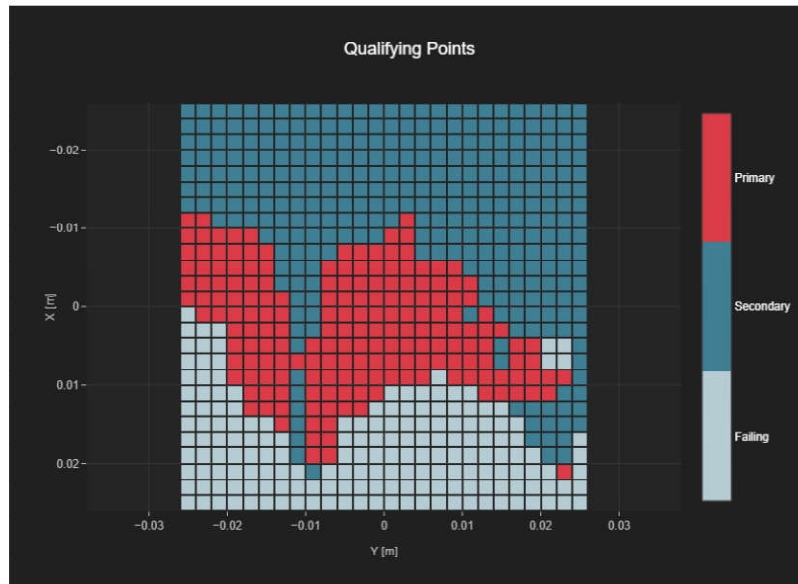
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 186                                  | 500                         | 24                               | 26                             |



# 31\_HAC T-coil\_FR1 n66\_40M\_QPSK\_1RB\_1Offset\_Ch349000

Measurement performed on March 21, 2024 at 05:49

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

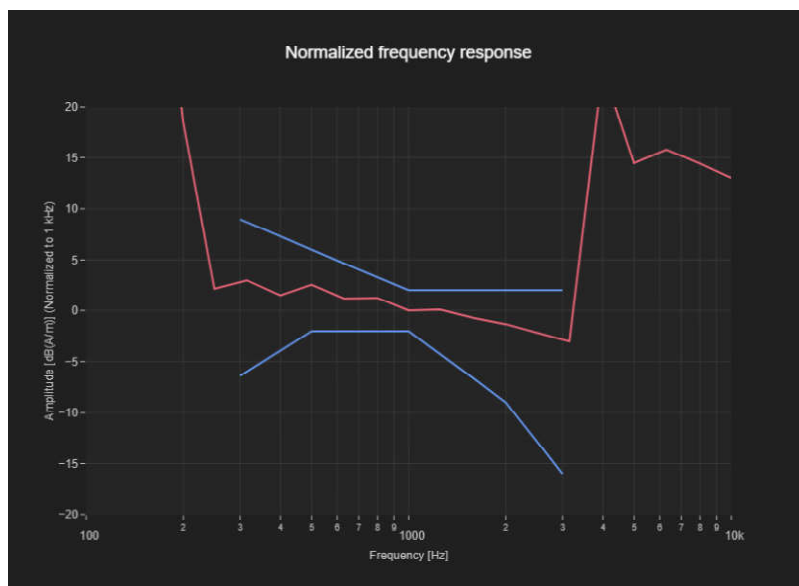
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| Band n66  | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) | 349000  | 1745.0          |

## 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

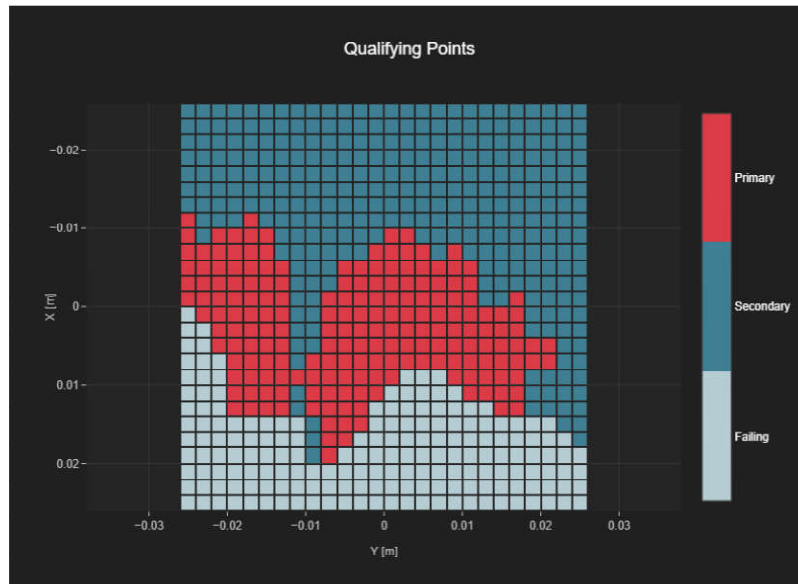
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 1.92                    | 2.0                     |



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 192                                  | 499                         | 23                               | 26                             |





# 32\_HAC T-coil\_FR1 n70\_15M\_QPSK\_1RB\_1Offset\_Ch340500

Measurement performed on March 21, 2024 at 06:25

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

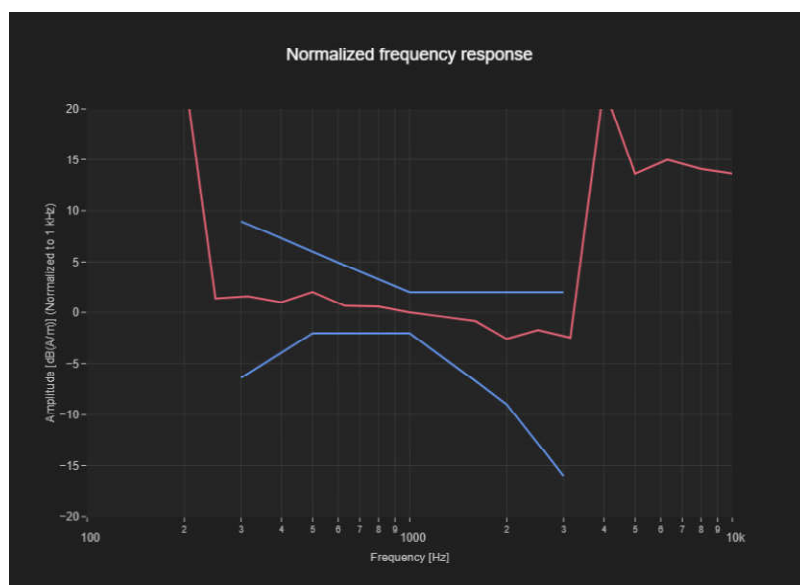
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| Band n70  | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz) | 340500  | 1702.5          |

## 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

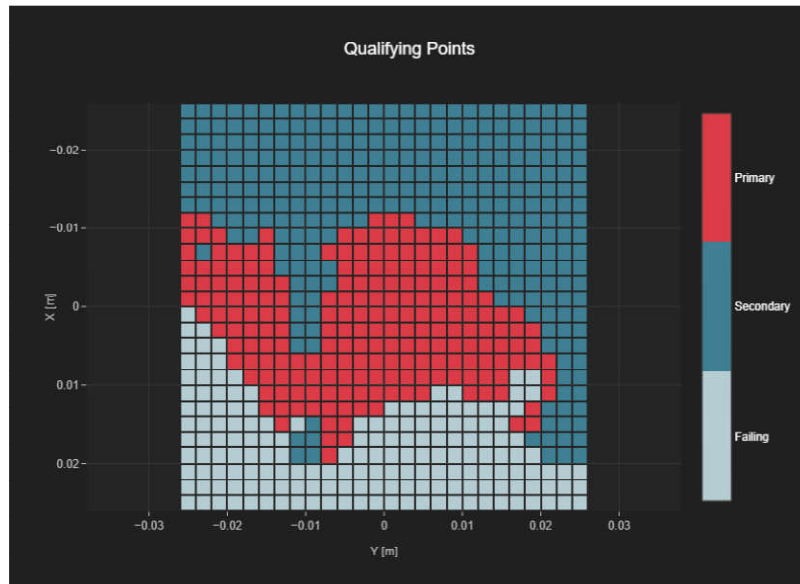
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 208                                  | 505                         | 23                               | 26                             |



# 33\_HAC T-coil\_FR1 n71\_20M\_QPSK\_1RB\_1Offset\_Ch136100

Measurement performed on March 21, 2024 at 06:57

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

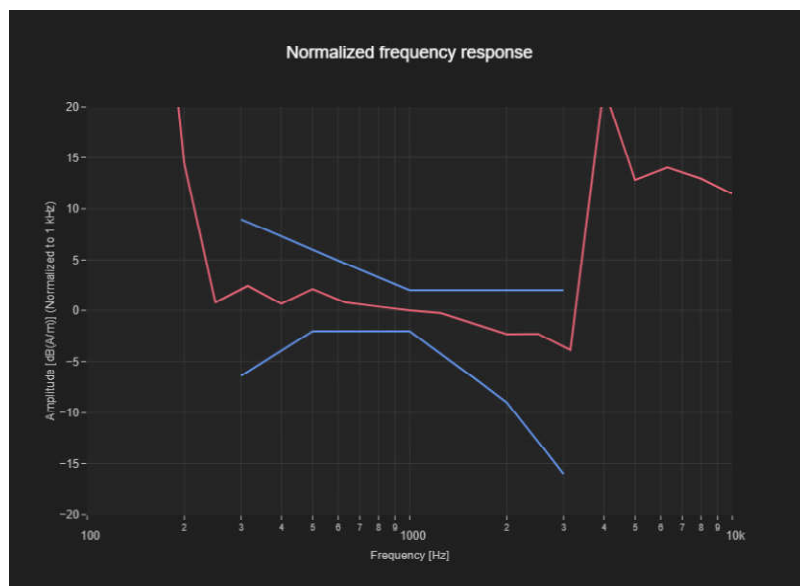
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| Band n71  | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz) | 136100  | 680.5           |

## 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

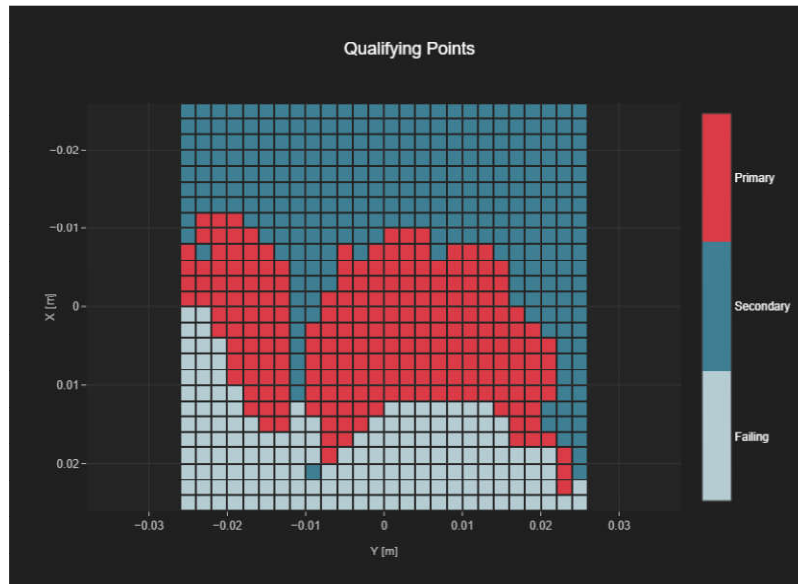
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 222                                  | 514                         | 25                               | 26                             |



# 34\_HAC T-coil\_FR1 n41\_100M\_QPSK\_1RB\_1Offset\_Ch518598

Measurement performed on March 19, 2024 at 16:34

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

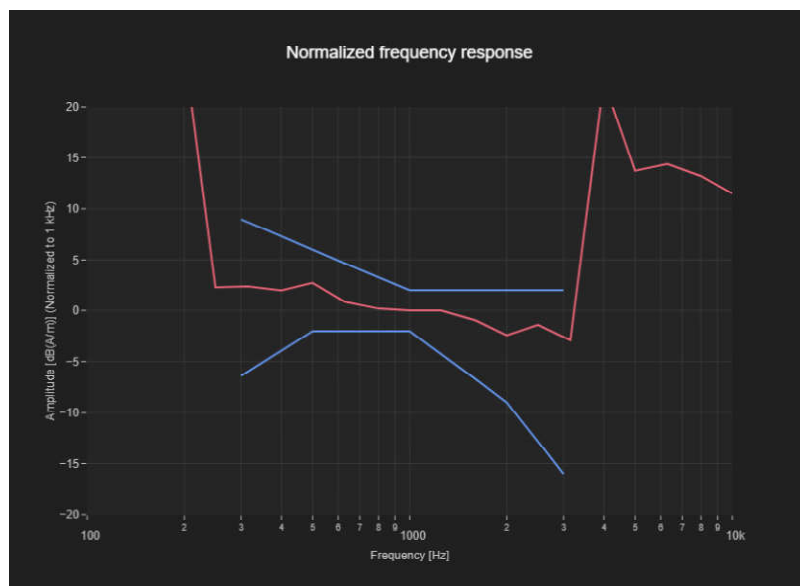
| Band Name | Communication Systems Name                      | Channel | Frequency [MHz] |
|-----------|-------------------------------------------------|---------|-----------------|
| Band n41  | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 518598  | 2592.99         |

## 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

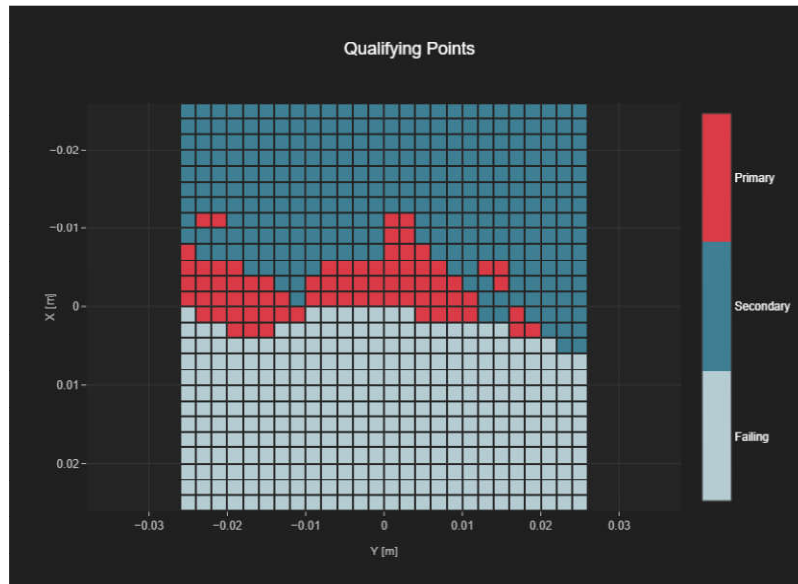
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 76                                   | 366                         | 16                               | 26                             |



# 35\_HAC T-coil\_FR1 n41\_100M\_QPSK\_1RB\_1Offset\_Ch518598

Measurement performed on March 25, 2024 at 15:30

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

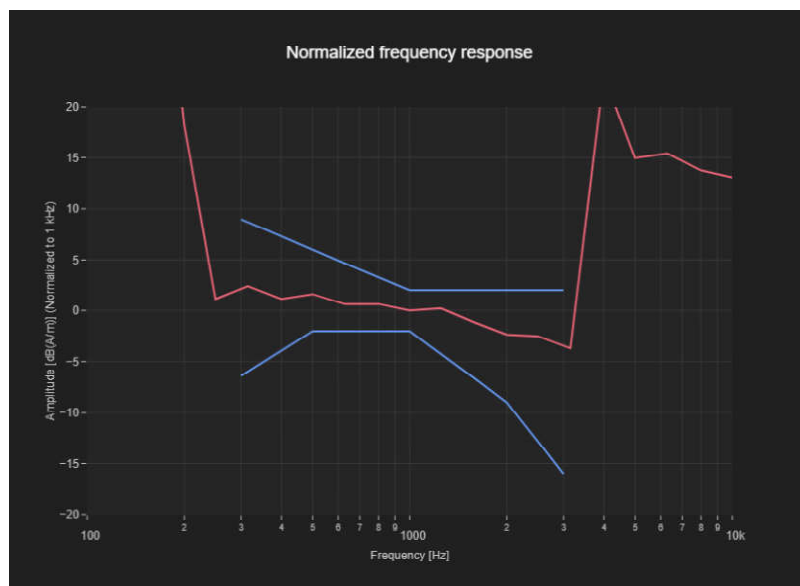
| Band Name | Communication Systems Name                      | Channel | Frequency [MHz] |
|-----------|-------------------------------------------------|---------|-----------------|
| Band n41  | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 518598  | 2592.99         |

## 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

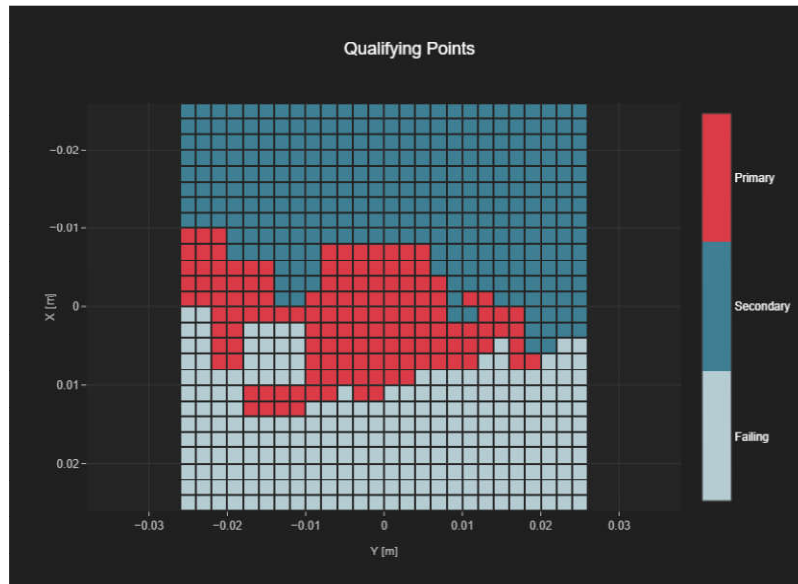
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 1.78                    | 2.0                     |



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 140                                  | 433                         | 19                               | 26                             |





# 36\_HAC T-coil\_FR1 n48\_40M\_QPSK\_1RB\_1Offset\_Ch641666

Measurement performed on March 21, 2024 at 07:46

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

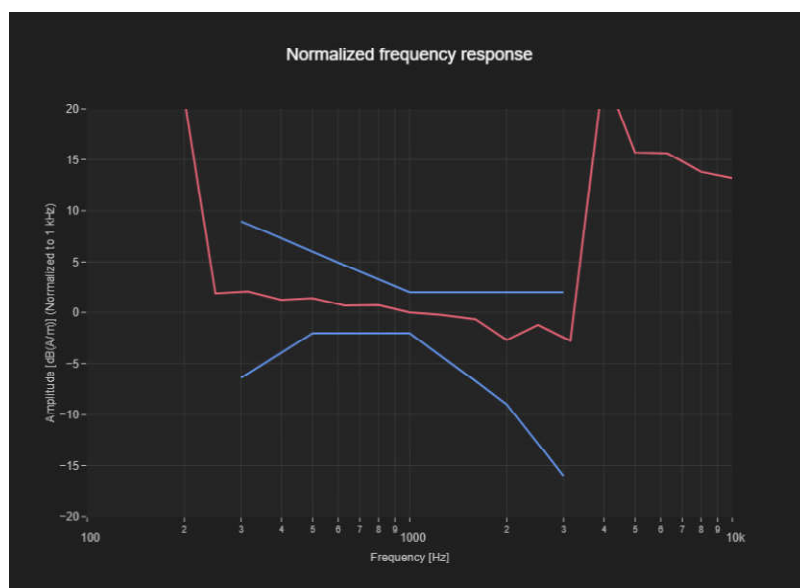
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| Band n48  | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz) | 641666  | 3624.985        |

## 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

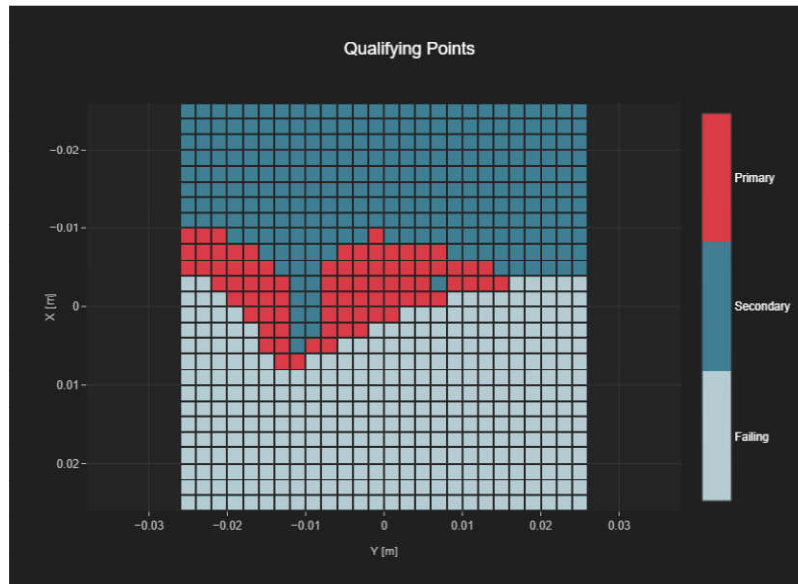
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 80                                   | 343                         | 17                               | 26                             |



# 37\_HAC T-coil\_FR1 n48\_40M\_QPSK\_1RB\_1Offset\_Ch641666

Measurement performed on March 25, 2024 at 14:43

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

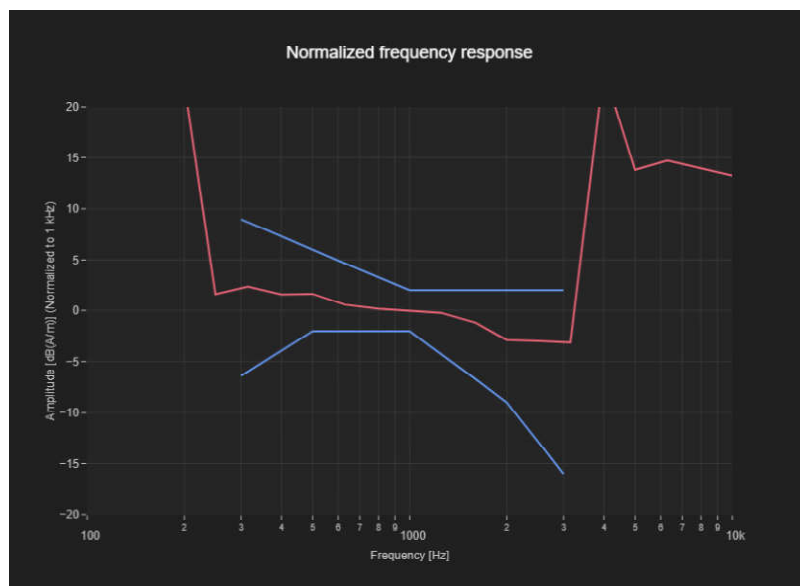
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| Band n48  | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz) | 641666  | 3624.985        |

## 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

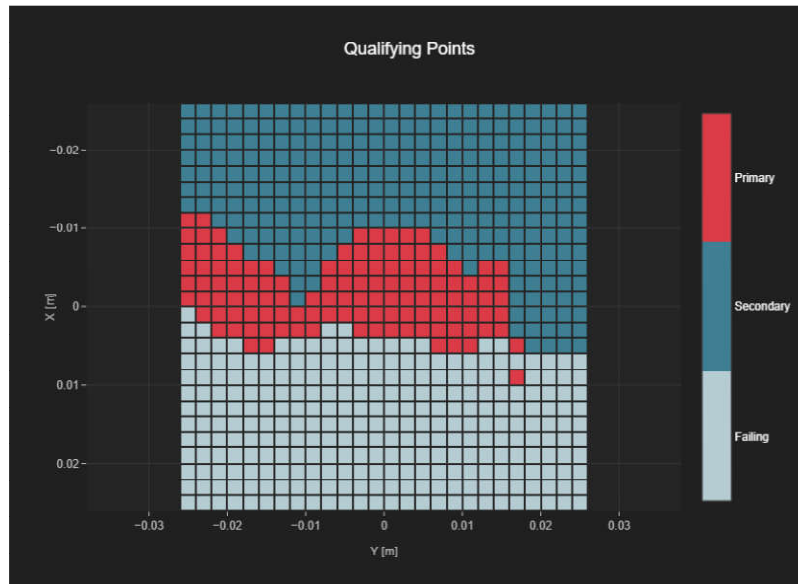
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 120                                  | 395                         | 16                               | 26                             |



# 38\_HAC T-coil\_FR1 n77\_100M\_QPSK\_1RB\_1Offset\_Ch656000

Measurement performed on March 21, 2024 at 08:18

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

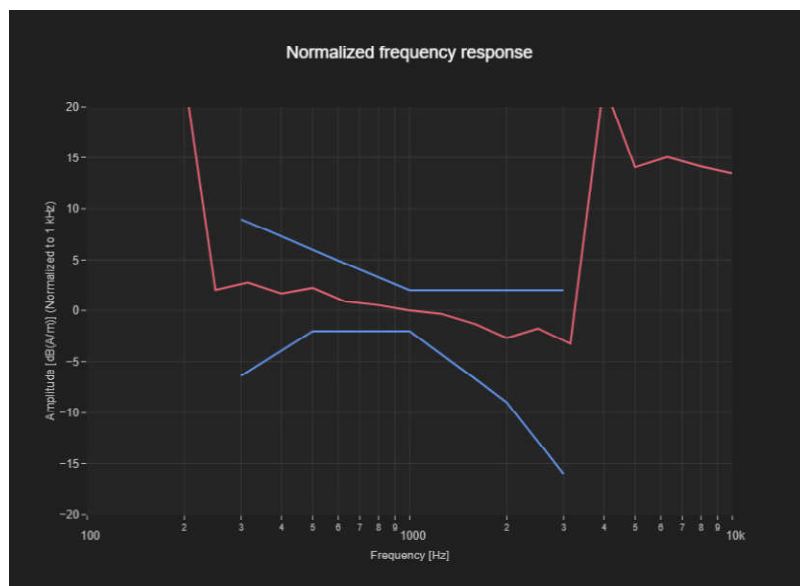
| Band Name | Communication Systems Name                      | Channel | Frequency [MHz] |
|-----------|-------------------------------------------------|---------|-----------------|
| Band n77  | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 656000  | 3840.0          |

## 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

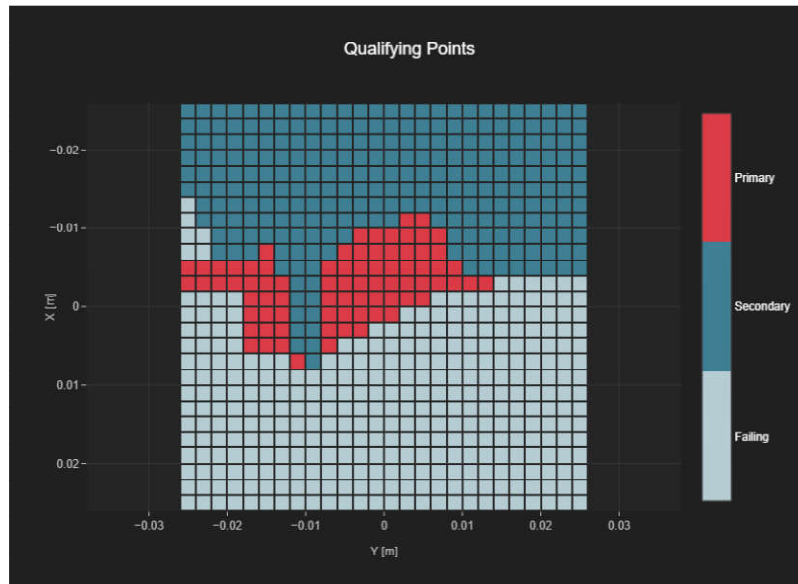
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 78                                   | 338                         | 17                               | 26                             |



# 39\_HAC T-coil\_FR1 n77\_100M\_QPSK\_1RB\_1Offset\_Ch656000

Measurement performed on March 25, 2024 at 13:42

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

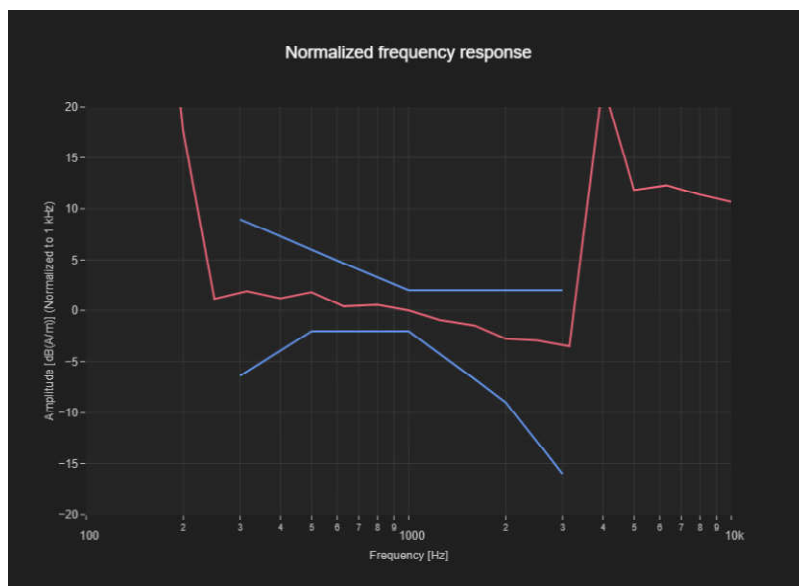
| Band Name | Communication Systems Name                      | Channel | Frequency [MHz] |
|-----------|-------------------------------------------------|---------|-----------------|
| Band n77  | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 656000  | 3840.0          |

## 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

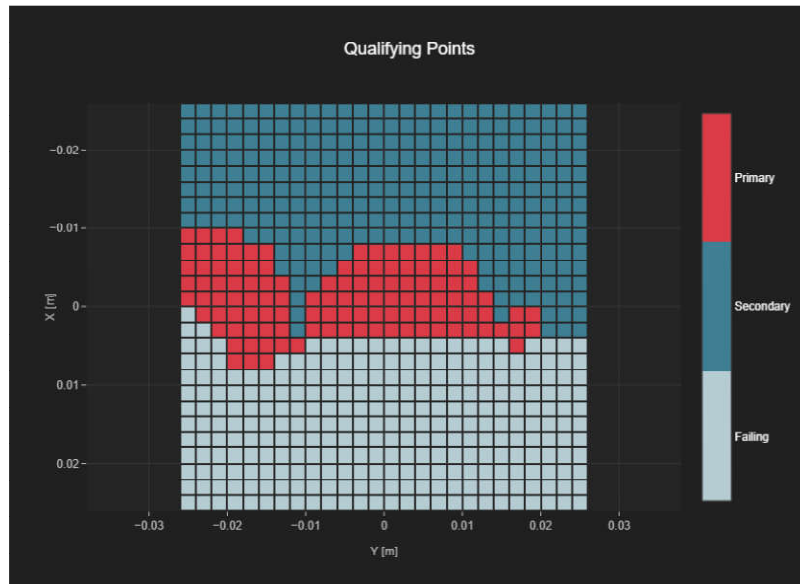
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 117                                  | 396                         | 17                               | 26                             |





# 40\_HAC T-coil\_FR1 n77\_100M\_QPSK\_1RB\_1Offset\_Ch633332

Measurement performed on March 21, 2024 at 09:24

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

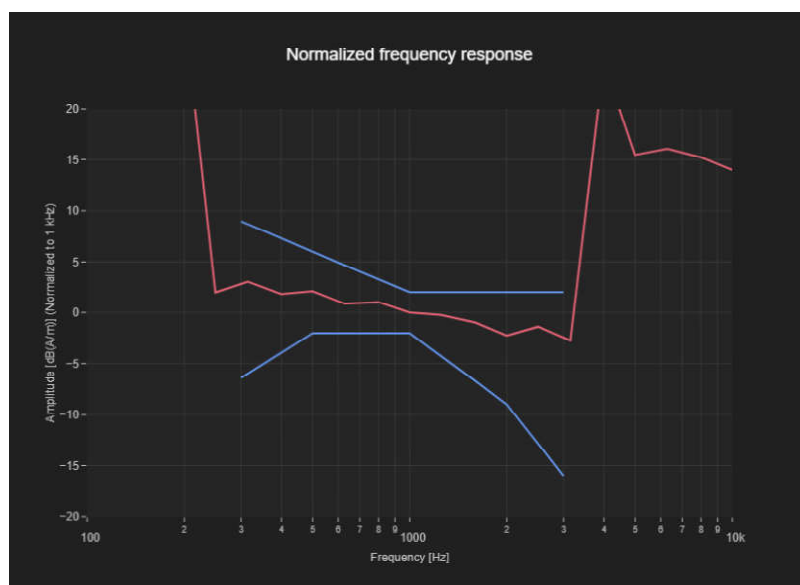
| Band Name | Communication Systems Name                      | Channel | Frequency [MHz] |
|-----------|-------------------------------------------------|---------|-----------------|
| Band n77  | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 633332  | 3499.98         |

## 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

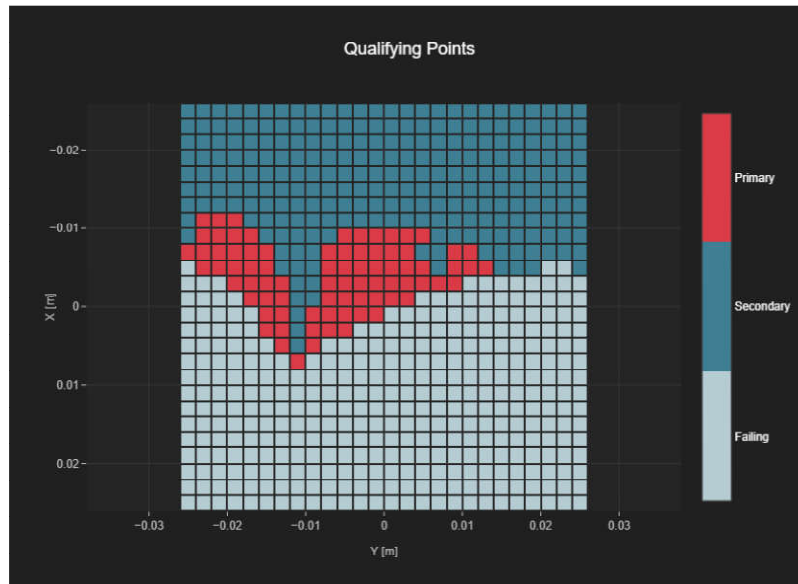
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 79                                   | 327                         | 17                               | 26                             |



# 41\_HAC T-coil\_FR1 n77\_100M\_QPSK\_1RB\_1Offset\_Ch633332

Measurement performed on March 25, 2024 at 14:00

## 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 - 3106 | December 13, 2023      | DAE4 Sn1649 | April 24, 2023       |

## Communication Systems

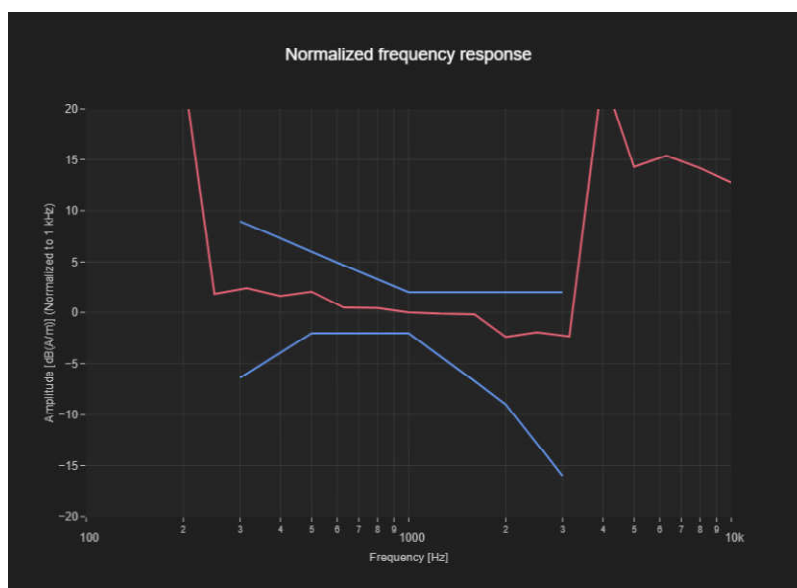
| Band Name | Communication Systems Name                      | Channel | Frequency [MHz] |
|-----------|-------------------------------------------------|---------|-----------------|
| Band n77  | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 633332  | 3499.98         |

## 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

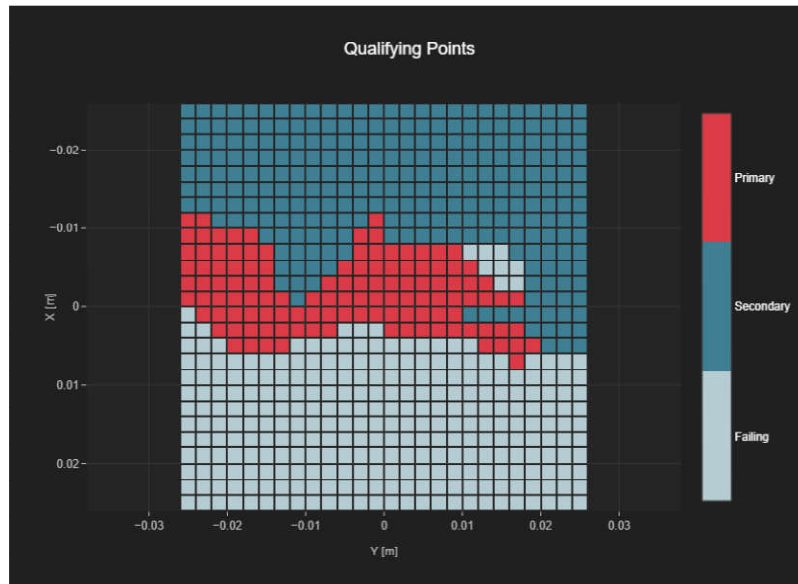
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 2.0                     |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 119                                  | 388                         | 16                               | 26                             |



# 42\_HAC T-coil\_WLAN2.4GHz\_802.11ac-VHT20 MCS0\_Ch6

Measurement performed on March 21, 2024

## 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 - 3106 | December 13, 2023      | DAE4 Sn1664 | June 06, 2023        |

## Communication Systems

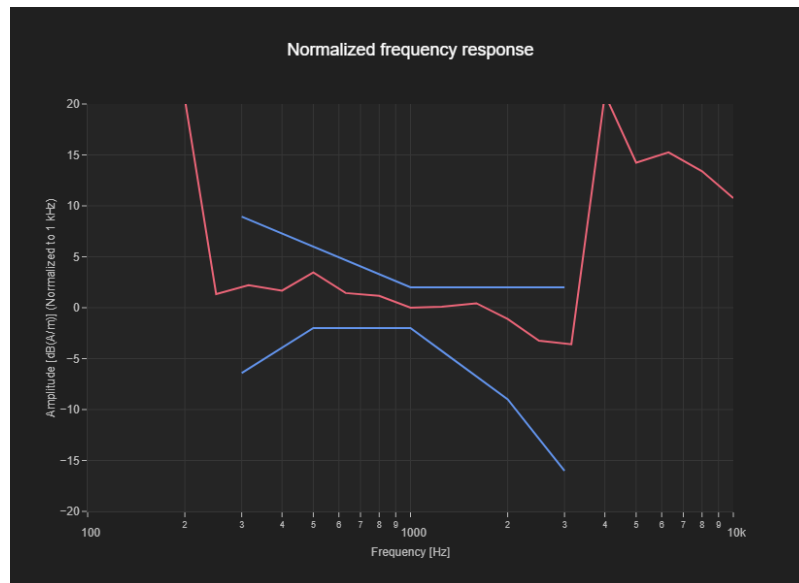
| Band Name   | Communication Systems Name                   | Channel | Frequency [MHz] |
|-------------|----------------------------------------------|---------|-----------------|
| WLAN 2.4GHz | IEEE 802.11ax (40MHz, MCS0, 90pc duty cycle) | 6       | 2437.0          |

## 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

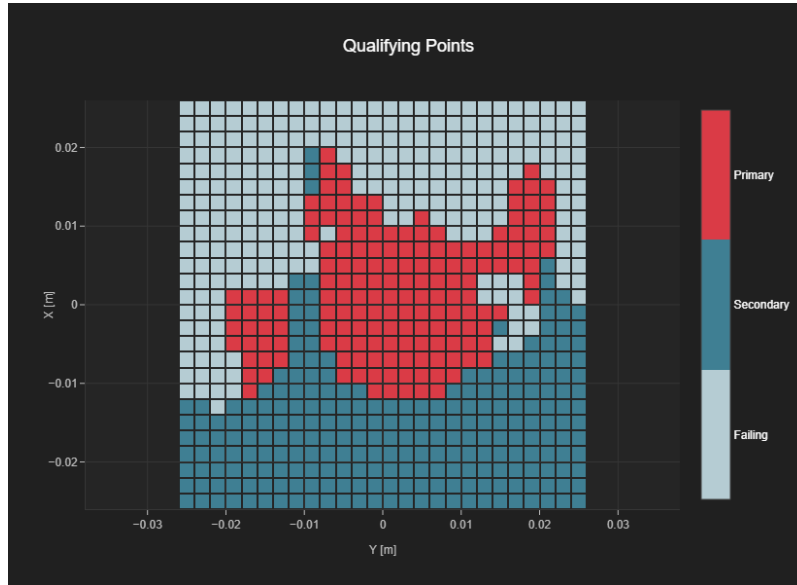
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 1.57                    | 2.0                     |



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 168                                  | 414                         | 22                               | 26                             |



# 43\_HAC T-coil\_WLAN5GHz\_802.11n-HT40 MCS0\_Ch38

Measurement performed on March 22, 2024

## 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 - 3106 | December 13, 2023      | DAE4 Sn1664 | June 06, 2023        |

## Communication Systems

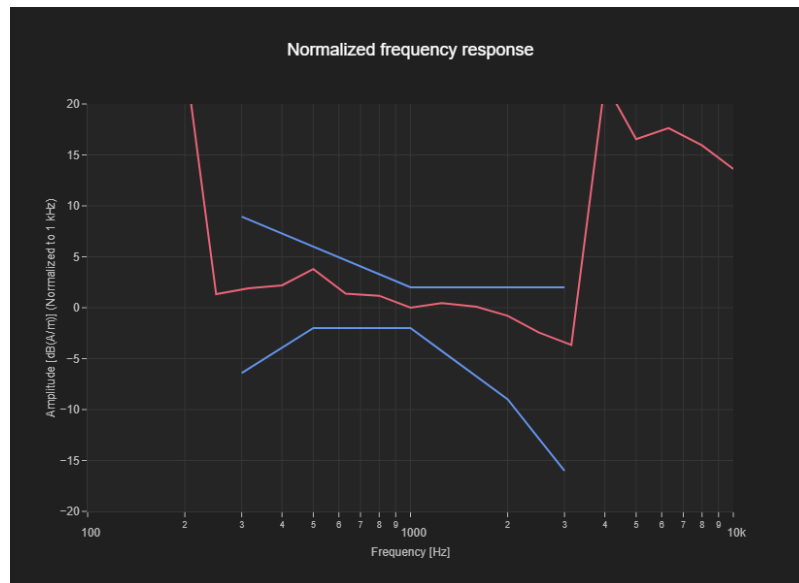
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| WLAN 5GHz | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM) | 38      | 5190.0          |

## 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

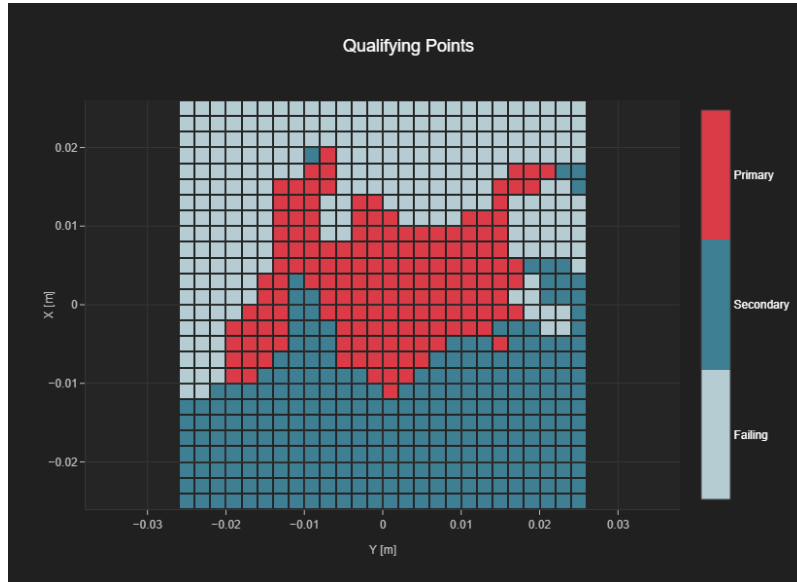
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 1.56                    | 2.0                     |



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 159                                  | 433                         | 23                               | 26                             |





# 44\_HAC T-coil\_WLAN5GHz\_802.11n-HT40 MCS0\_Ch54

Measurement performed on March 22, 2024

## 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 - 3106 | December 13, 2023      | DAE4 Sn1664 | June 06, 2023        |

## Communication Systems

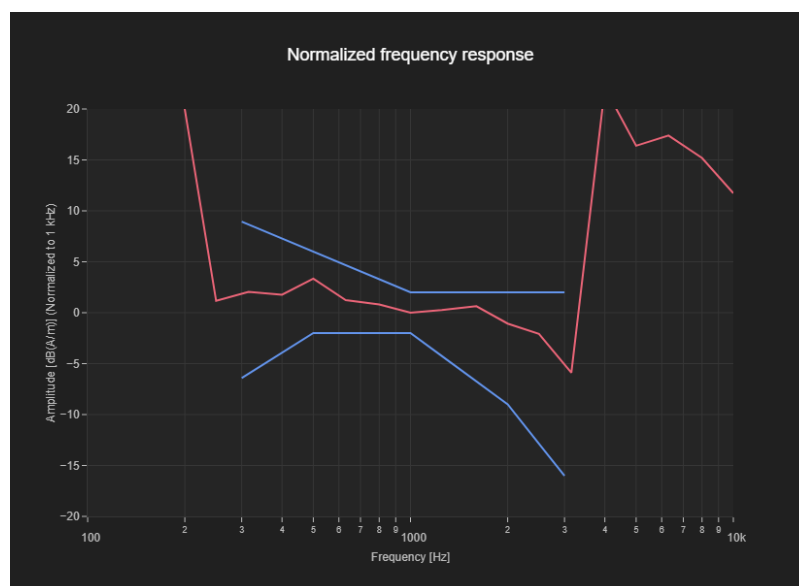
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| WLAN 5GHz | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM) | 54      | 5270.0          |

## 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

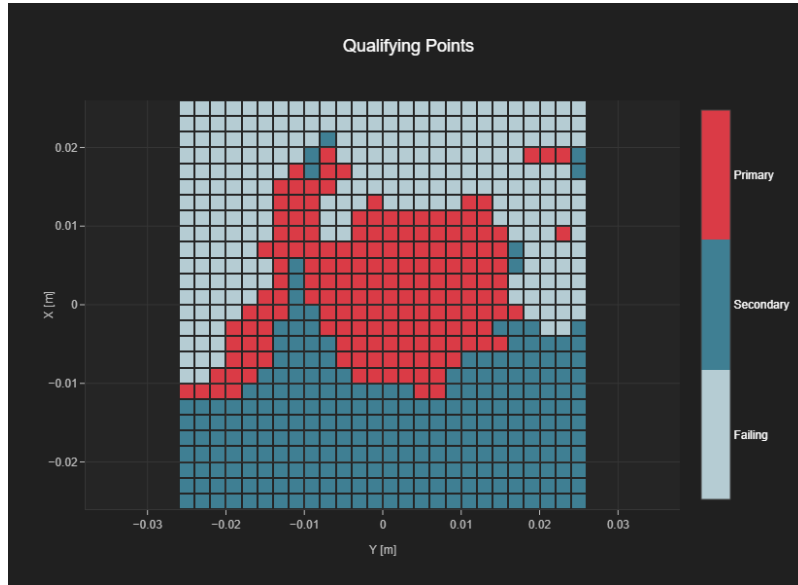
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 1.36                    |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



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 172                                  | 428                         | 23                               | 26                             |



# 45\_HAC T-coil\_WLAN5GHz\_802.11n-HT40 MCS0\_Ch142

Measurement performed on March 22, 2024

## 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 - 3106 | December 13, 2023      | DAE4 Sn1664 | June 06, 2023        |

## Communication Systems

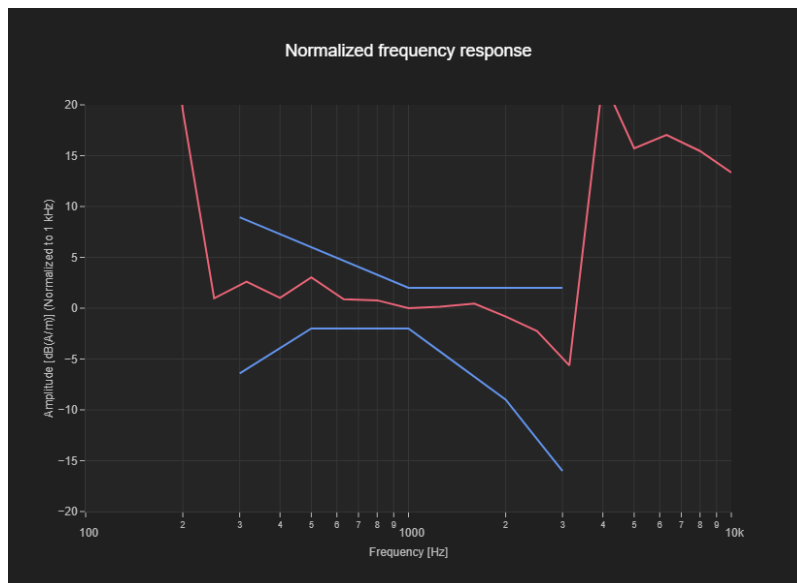
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| WLAN 5GHz | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM) | 142     | 5710.0          |

## 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

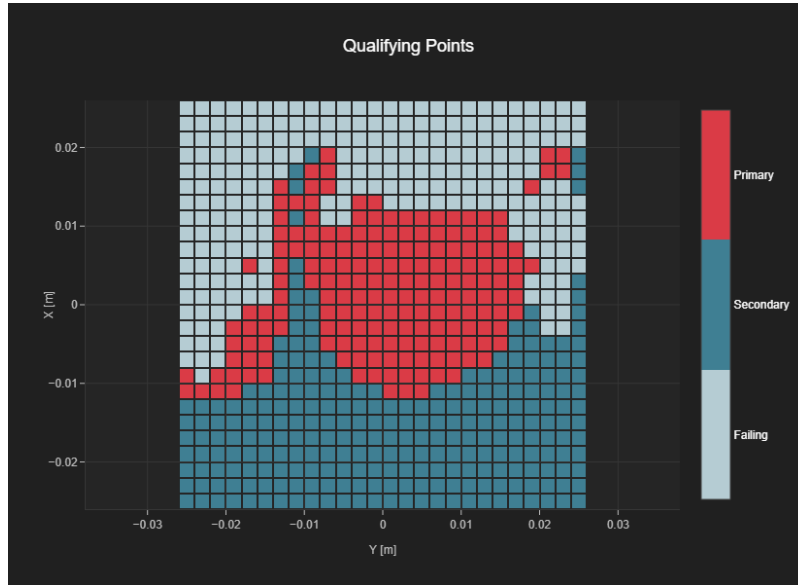
| Audio File                | Measurement Duration [s] | Margin Upper Bound [dB] | Margin Lower Bound [dB] |
|---------------------------|--------------------------|-------------------------|-------------------------|
| 48k_voice_300-3000_2s.wav | 2.0                      | 1.54                    | 2.0                     |



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 184                                  | 436                         | 23                               | 26                             |



# 46\_HAC T-coil\_WLAN5GHz\_802.11n-HT40 MCS0\_Ch151

Measurement performed on March 22, 2024

## 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 - 3106 | December 13, 2023      | DAE4 Sn1664 | June 06, 2023        |

## Communication Systems

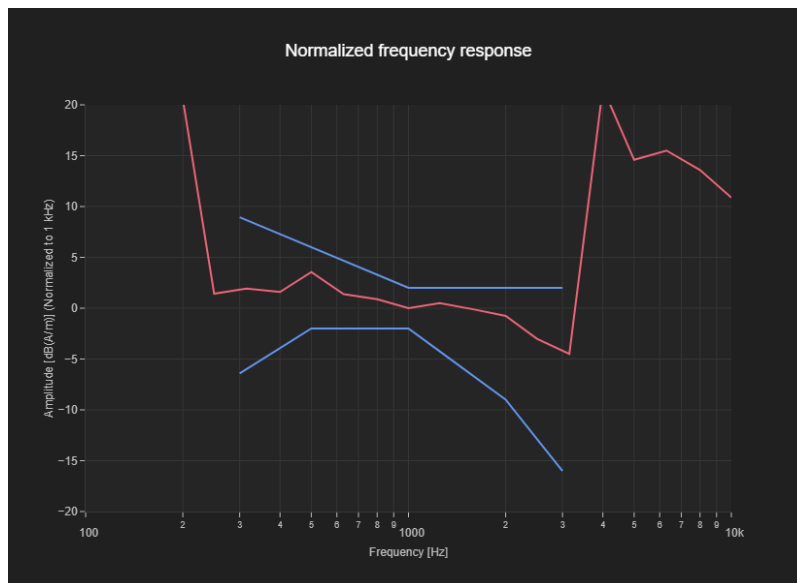
| Band Name | Communication Systems Name                     | Channel | Frequency [MHz] |
|-----------|------------------------------------------------|---------|-----------------|
| WLAN 5GHz | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM) | 151     | 5755.0          |

## 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                      | 1.49                    | 2.0                     |



# T-Coil Coupling Mode Test Report

## Results

| Primary Group Contiguous Point Count | Secondary Group Point Count | Secondary Group Max Longitudinal | Secondary Group Max Transverse |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|
| 174                                  | 430                         | 24                               | 26                             |

