# 01_HAC RF_GSM850_GSM Voice_Ch128_E

Measurement performed on November 16, 2023 at 05:42

## 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 |
|---|---|---|---|
| EF3DV3 - SN4050 | January 24, 2023 | DAE4 Sn1691 | December 12, 2022 |

## Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|---|---|---|---|
| GSM 850 | GSM-FDD (TDMA, GMSK) | 128 | 824.2 |

## Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---|---|---|---|---|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

## Results

| Emax [dB(V/m)] | Eavg50x50 max [dB(V/m)] | | RFail [dB(V/m)] |
|---|---|---|---|
| 18.81 | 16.68 | | 20.31 |



Interpolated E-field [dB(V/m)]
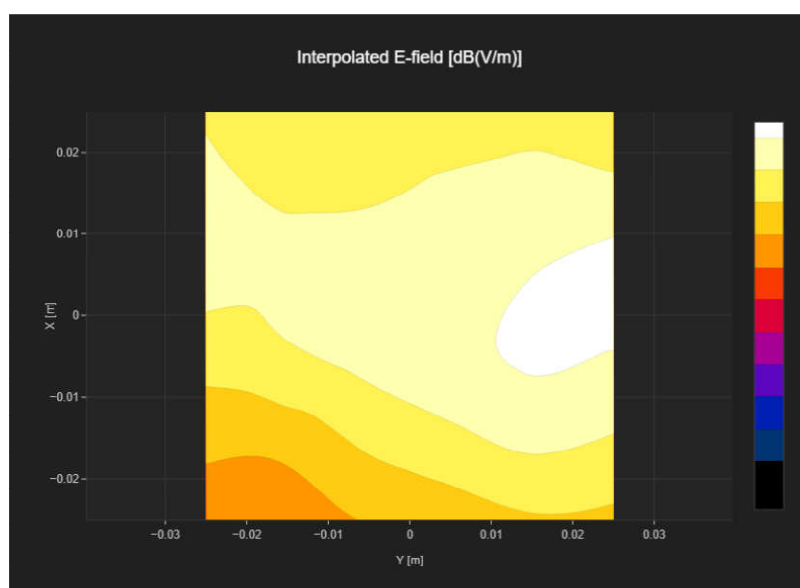
# 02_HAC RF_GSM850_GSM Voice_Ch189_E

Measurement performed on November 16, 2023 at 05:45

## 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 |
|---|---|---|---|
| EF3DV3 - SN4050 | January 24, 2023 | DAE4 Sn1691 | December 12, 2022 |

## 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] |
|---|---|---|---|---|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

## Results

| Emax [dB(V/m)] | Eavg50x50 max [dB(V/m)] | | RFail [dB(V/m)] |
|---|---|---|---|
| 19.95 | 18.4 | | 22.03 |
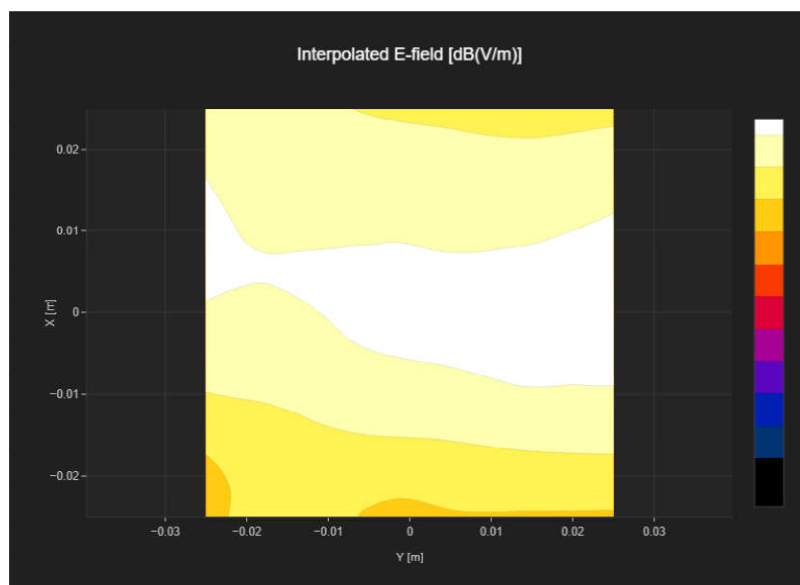
# 03_HAC RF_GSM850_GSM Voice_Ch251_E

Measurement performed on November 16, 2023 at 05:47

## 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 |
|---|---|---|---|
| EF3DV3 - SN4050 | January 24, 2023 | DAE4 Sn1691 | December 12, 2022 |

## Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|---|---|---|---|
| GSM 850 | GSM-FDD (TDMA, GMSK) | 251 | 848.8 |

## Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---|---|---|---|---|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

## Results

| Emax [dB(V/m)] | Eavg50x50 max [dB(V/m)] |  | RFail [dB(V/m)] |
|---|---|---|---|
| 20.8 | 20.02 |  | 23.65 |



Interpolated E-field [dB(V/m)]
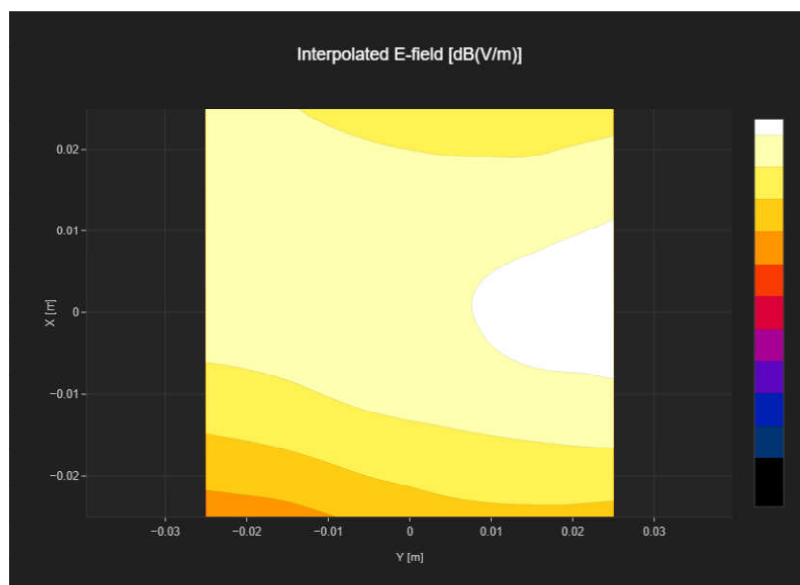
# 04_HAC RF_GSM1900_GSM Voice_Ch512_E

Measurement performed on November 16, 2023 at 05:56

## 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 |
|---|---|---|---|
| EF3DV3 - SN4050 | January 24, 2023 | DAE4 Sn1691 | December 12, 2022 |

## Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|---|---|---|---|
| PCS 1900 | GSM-FDD (TDMA, GMSK) | 512 | 1850.2 |

## Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---|---|---|---|---|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

## Results

| Emax [dB(V/m)] | Eavg50x50 max [dB(V/m)] | | RFail [dB(V/m)] |
|---|---|---|---|
| 28.37 | 23.64 | | 27.27 |



Interpolated E-field [dB(V/m)]
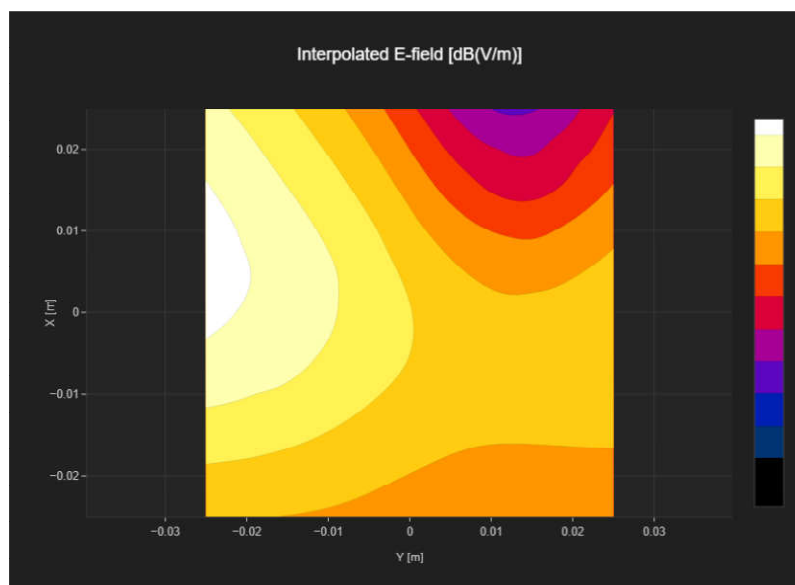
# 05_HAC RF_GSM1900_GSM Voice_Ch661_E

Measurement performed on November 16, 2023 at 05:59

## 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 |
|---|---|---|---|
| EF3DV3 - SN4050 | January 24, 2023 | DAE4 Sn1691 | December 12, 2022 |

## 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] |
|---|---|---|---|---|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

## Results

| Emax [dB(V/m)] | Eavg50x50 max [dB(V/m)] |  | RFail [dB(V/m)] |
|---|---|---|---|
| 29.02 | 24.39 |  | 28.02 |
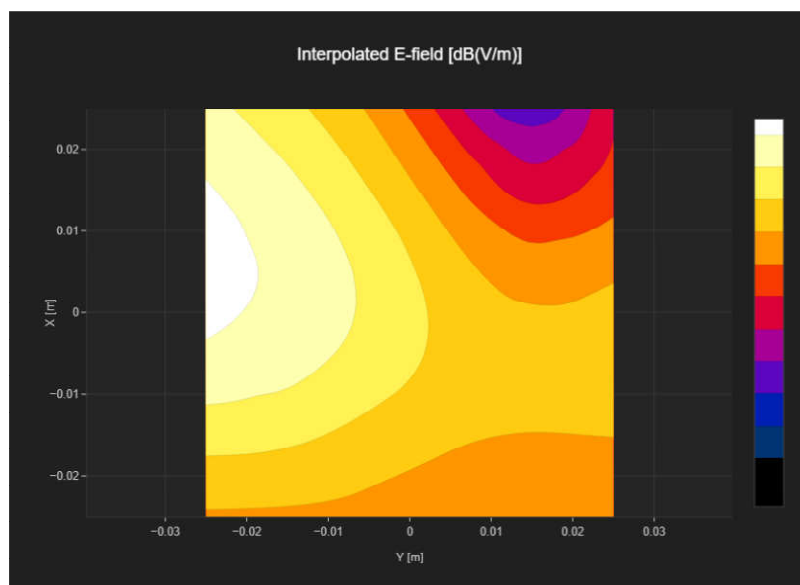
# 06_HAC RF_GSM1900_GSM Voice_Ch810_E

Measurement performed on November 16, 2023 at 06:01

## 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 |
|---|---|---|---|
| EF3DV3 - SN4050 | January 24, 2023 | DAE4 Sn1691 | December 12, 2022 |

## Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|---|---|---|---|
| PCS 1900 | GSM-FDD (TDMA, GMSK) | 810 | 1909.8 |

## Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---|---|---|---|---|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

## Results

| Emax [dB(V/m)] | Eavg50x50 max [dB(V/m)] | | RFail [dB(V/m)] |
|---|---|---|---|
| 30.4 | 25.79 | | 29.42 |
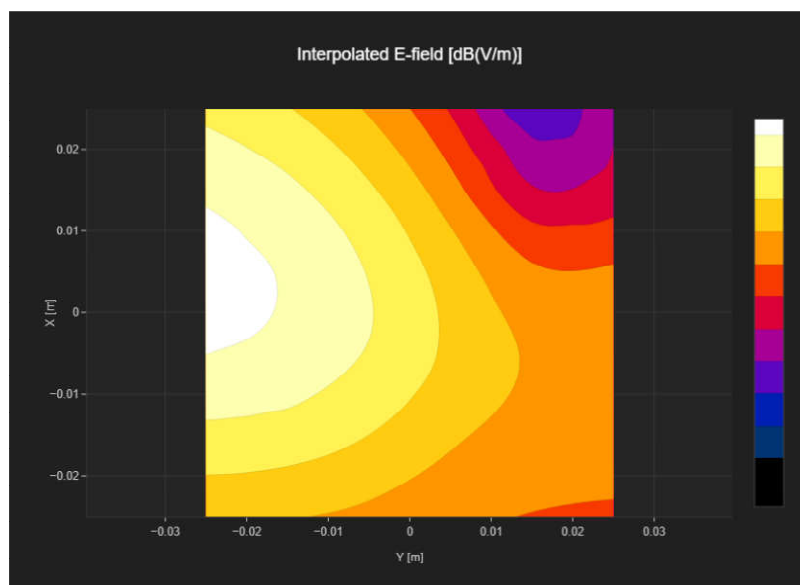
# 07_HAC RF_LTE Band 41_20M_QPSK_1RB_0Offset_Ch39750_E

Measurement performed on November 16, 2023 at 04:57

## 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 |
|---|---|---|---|
| EF3DV3 - SN4050 | January 24, 2023 | DAE4 Sn1691 | December 12, 2022 |

## Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|---|---|---|---|
| Band 41, E-UTRA/TDD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | 39750 | 2506.0 |

## Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---|---|---|---|---|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

## Results

| Emax [dB(V/m)] | Eavg50x50 max [dB(V/m)] | MIF [dB] | RFail [dB(V/m)] |
|---|---|---|---|
| 25.93 | 22.35 | -1.44 | 20.91 |
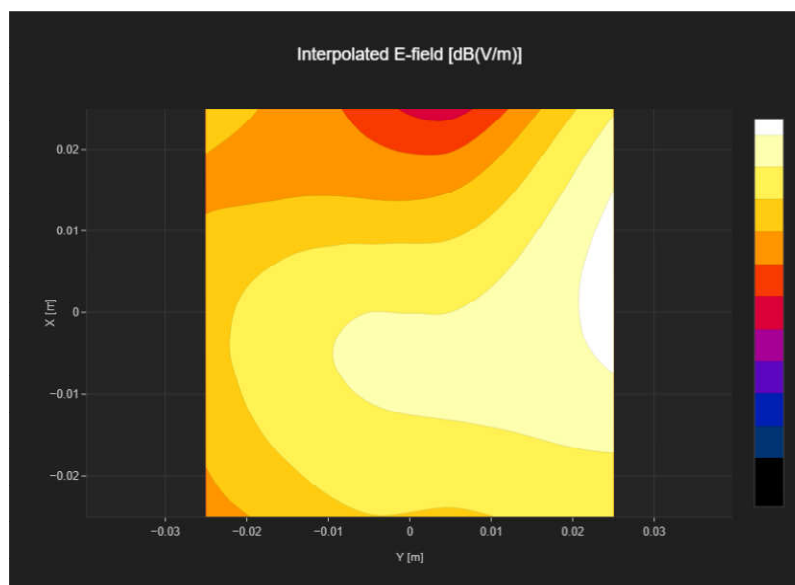
# 08_HAC RF_LTE Band 41_20M_QPSK_1RB_0Offset_Ch40185_E

Measurement performed on November 16, 2023 at 05:12

## 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 |
|---|---|---|---|
| EF3DV3 - SN4050 | January 24, 2023 | DAE4 Sn1691 | December 12, 2022 |

## Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|---|---|---|---|
| Band 41, E-UTRA/TDD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | 40185 | 2549.5 |

## Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---|---|---|---|---|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

## Results

| Emax [dB(V/m)] | Eavg50x50 max [dB(V/m)] | MIF [dB] | RFail [dB(V/m)] |
|---|---|---|---|
| 25.95 | 23.9 | -1.44 | 22.46 |



Interpolated E-field [dB(V/m)]
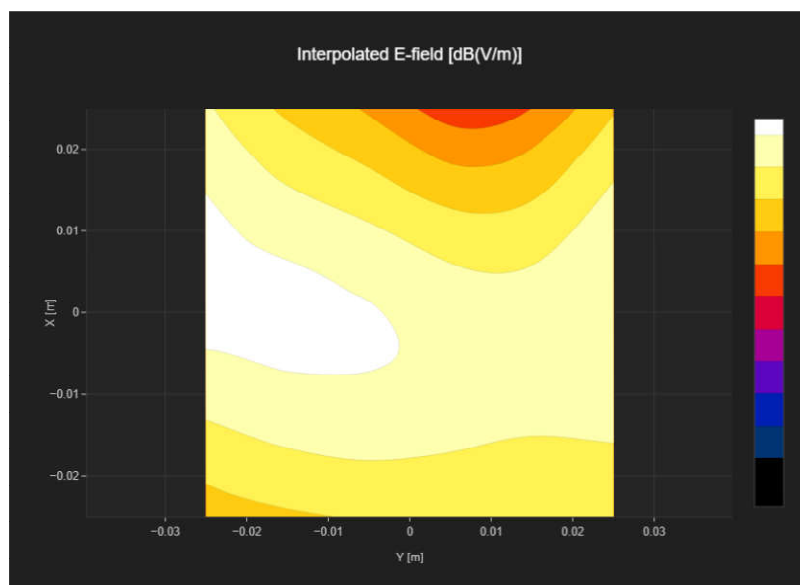
# 09_HAC RF_LTE Band 41_20M_QPSK_1RB_0Offset_Ch40620_E

Measurement performed on November 16, 2023 at 05:18

## 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 |
|---|---|---|---|
| EF3DV3 - SN4050 | January 24, 2023 | DAE4 Sn1691 | December 12, 2022 |

## Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|---|---|---|---|
| Band 41, E-UTRA/TDD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | 40620 | 2593.0 |

## Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---|---|---|---|---|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

## Results

| Emax [dB(V/m)] | Eavg50x50 max [dB(V/m)] | MIF [dB] | RFail [dB(V/m)] |
|---|---|---|---|
| 27.21 | 24.49 | -1.44 | 23.05 |
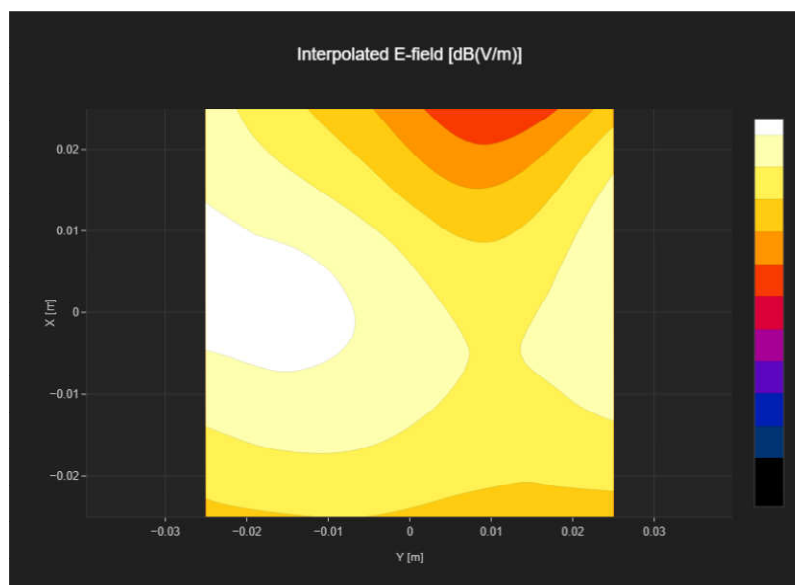
# 10_HAC RF_LTE Band 41_20M_QPSK_1RB_0Offset_Ch41055_E

Measurement performed on November 16, 2023 at 05:28

## 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 |
|---|---|---|---|
| EF3DV3 - SN4050 | January 24, 2023 | DAE4 Sn1691 | December 12, 2022 |

## Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|---|---|---|---|
| Band 41, E-UTRA/TDD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | 41055 | 2636.5 |

## Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---|---|---|---|---|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

## Results

| Emax [dB(V/m)] | Eavg50x50 max [dB(V/m)] | MIF [dB] | RFail [dB(V/m)] |
|---|---|---|---|
| 25.44 | 22.84 | -1.44 | 21.4 |
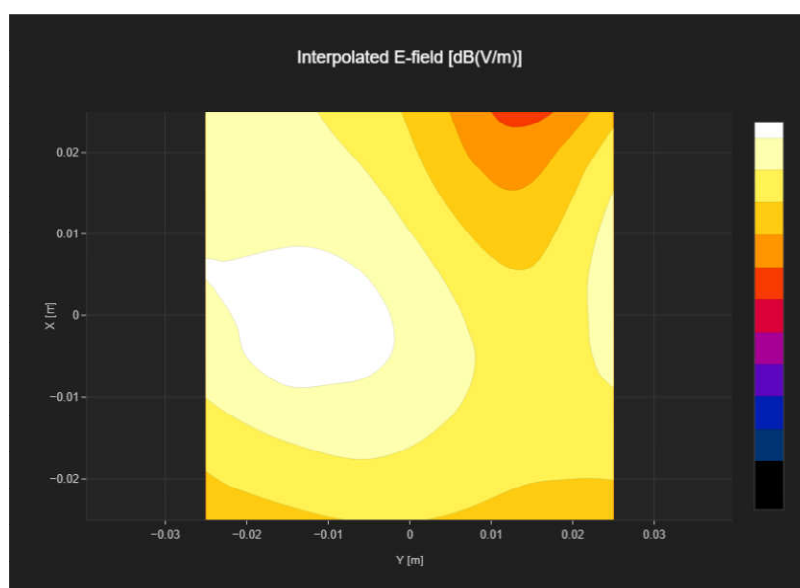
# 11_HAC RF_LTE Band 41_20M_QPSK_1RB_0Offset_Ch41490_E

Measurement performed on November 16, 2023 at 05:25

## 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 |
|---|---|---|---|
| EF3DV3 - SN4050 | January 24, 2023 | DAE4 Sn1691 | December 12, 2022 |

## Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|---|---|---|---|
| Band 41, E-UTRA/TDD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | 41490 | 2680.0 |

## Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---|---|---|---|---|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

## Results

| Emax [dB(V/m)] | Eavg50x50 max [dB(V/m)] | MIF [dB] | RFail [dB(V/m)] |
|---|---|---|---|
| 24.92 | 22.31 | -1.44 | 20.87 |


Interpolated E-field [dB(V/m)]