Annex C Plots of T-Coil Test Results

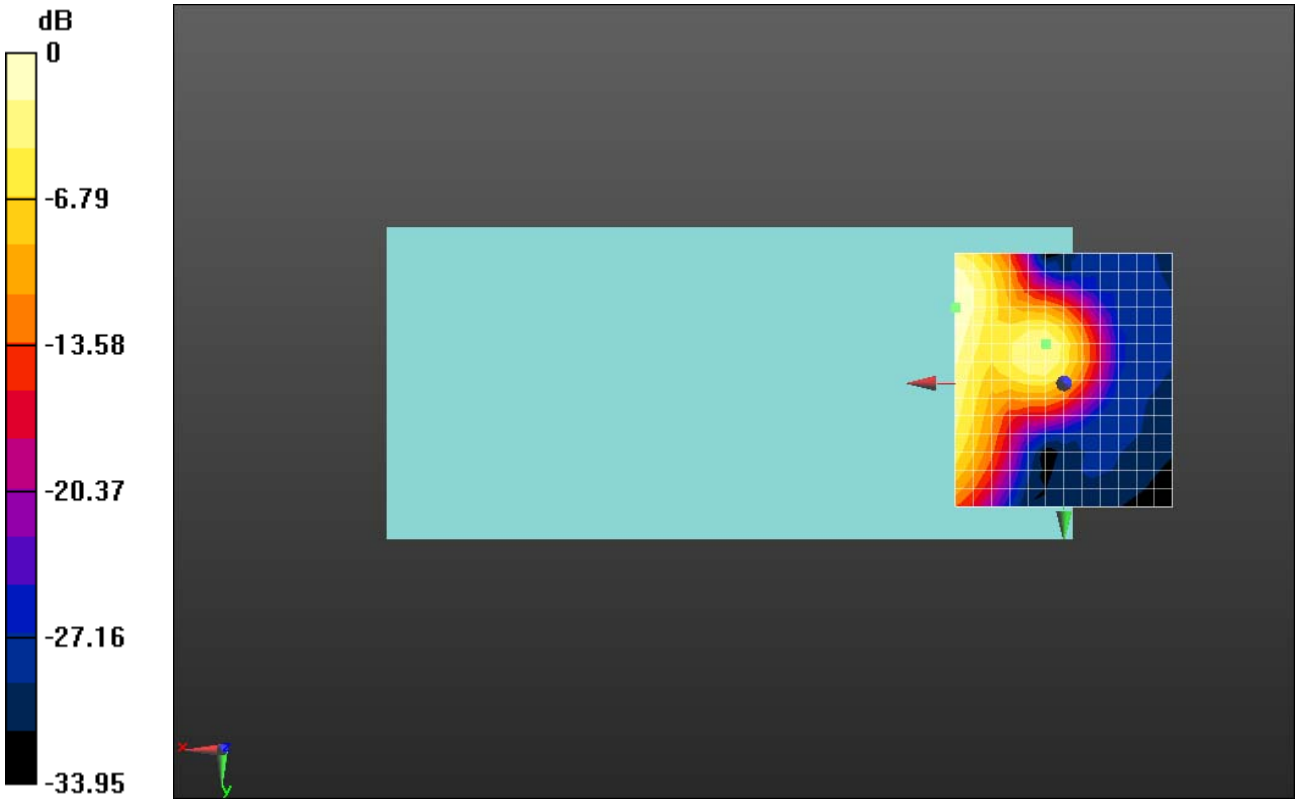
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.26

HAC_T-Coil_GSM850_GSM Voice_Ch189_Z

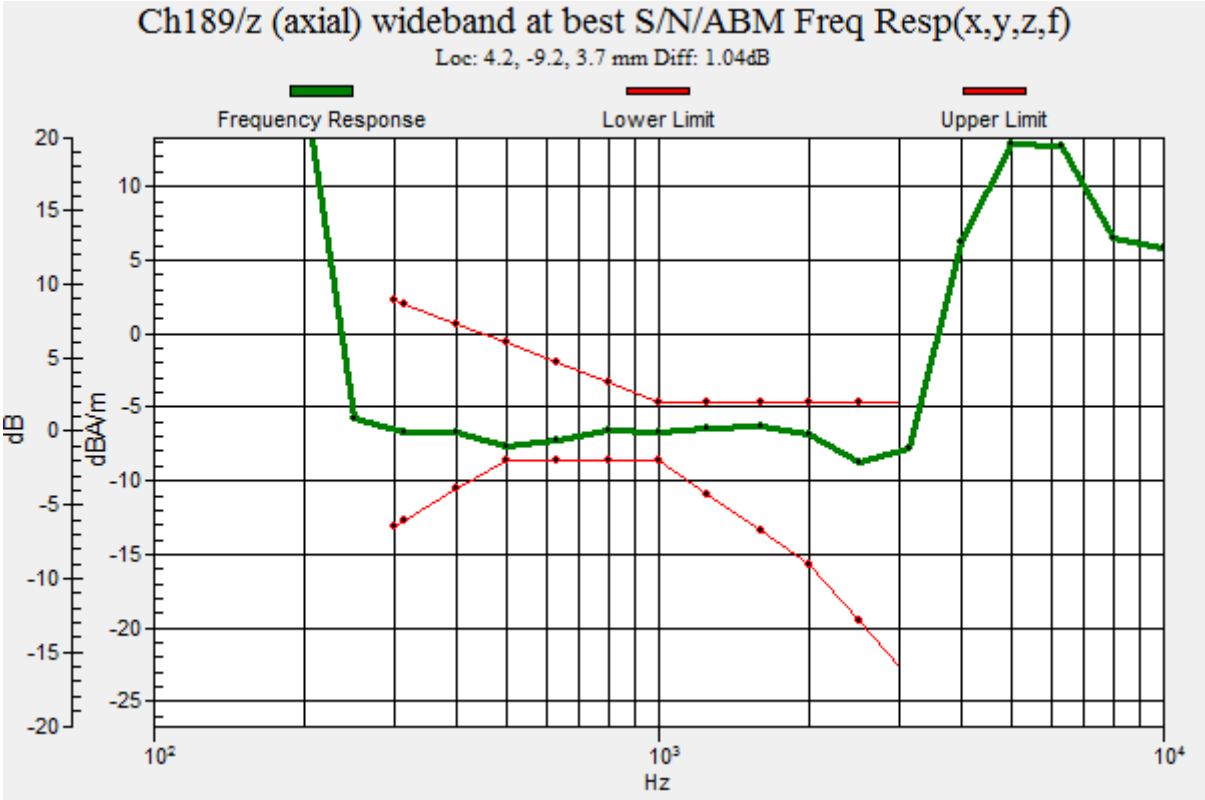
Communication System: UID 0, Generic GSM (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30042
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch189/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 24.37 dB
ABM1 comp = -6.10 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 16.53 = 24.37 dB


Ch189/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 1.04dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
-25
10^2
10^3
10^4

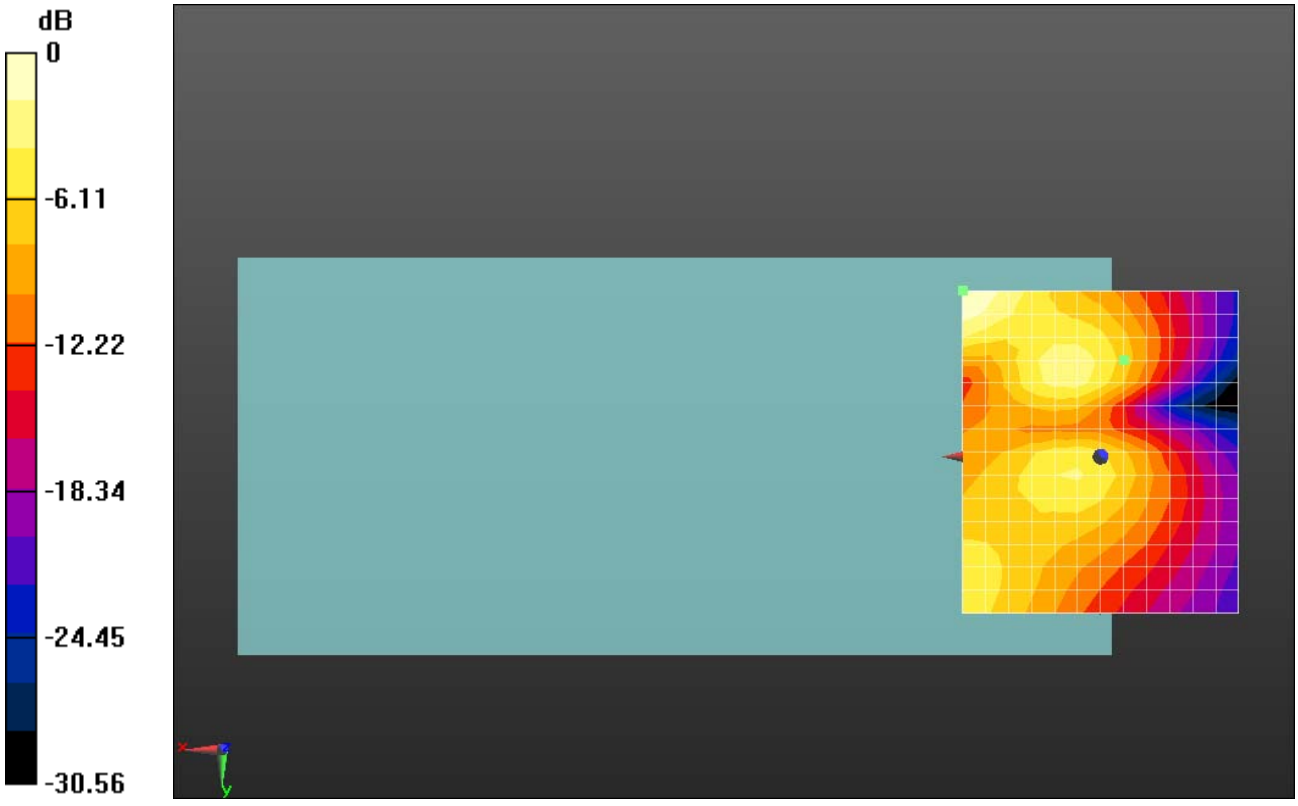
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.03

HAC_T-Coil_GSM850_GSM Voice_Ch189_Y

Communication System: UID 0, Generic GSM (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30042
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch189/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 22.09 dB
ABM1 comp = -17.11 dBA/m
BWC Factor = 0.18 dB
Location: -4.2, -17.5, 3.7 mm



0 dB = 12.72 = 22.09 dB

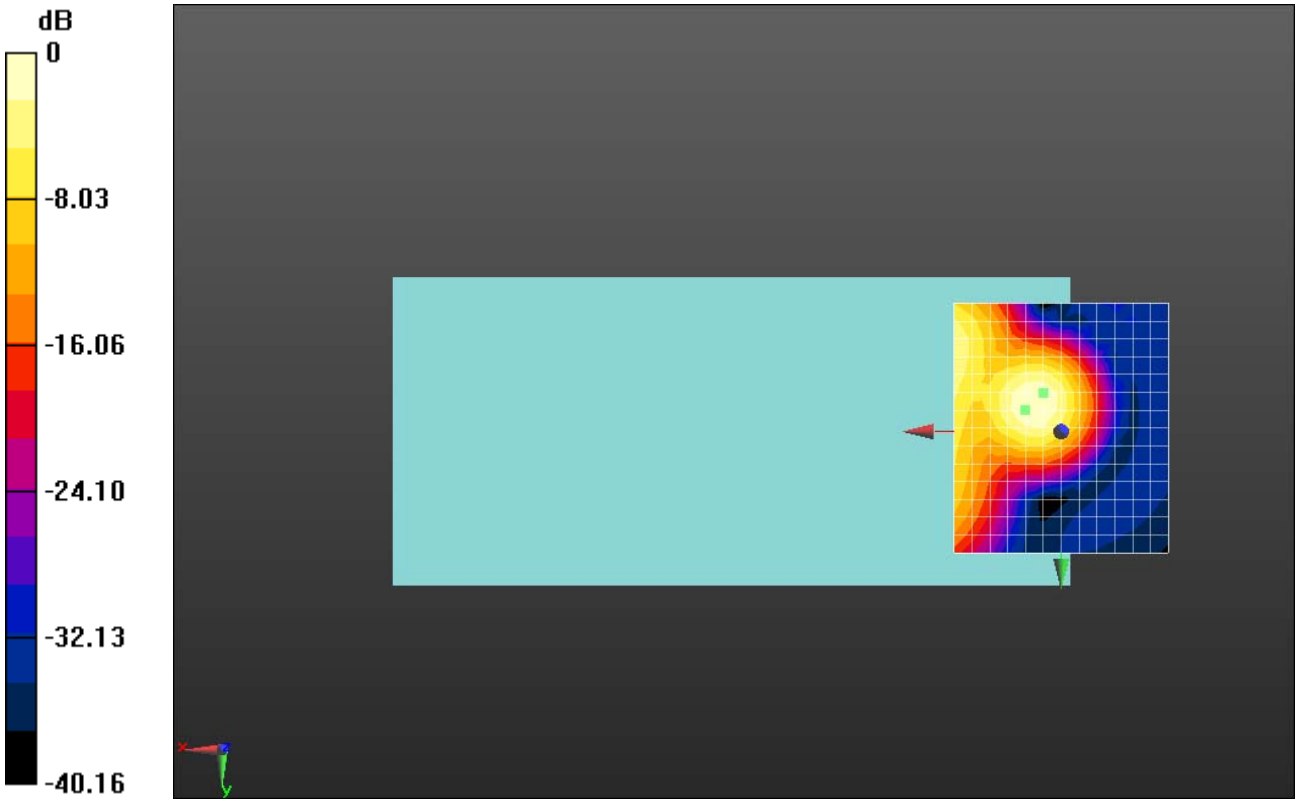
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.27

HAC_T-Coil_GSM1900_GSM Voice_Ch661_Z

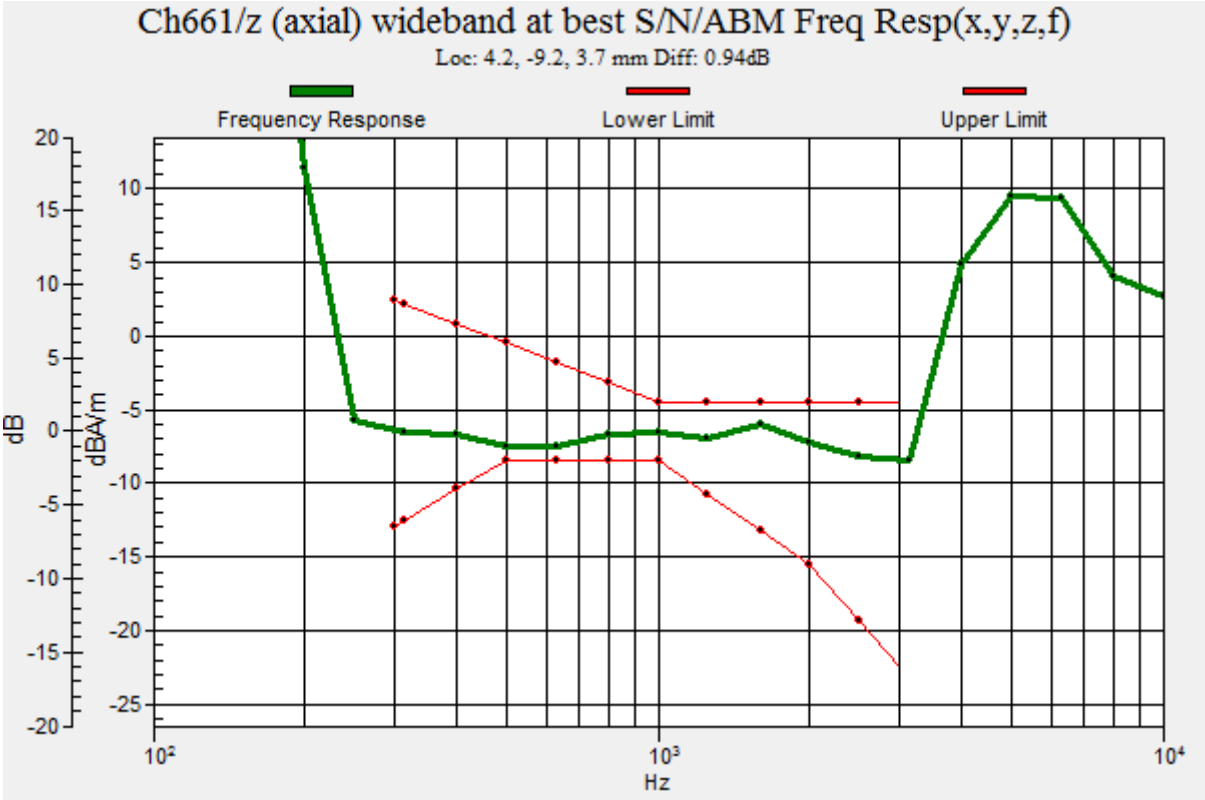
Communication System: UID 0, Generic GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch661/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 29.78 dB
ABM1 comp = -6.17 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 30.84 = 29.78 dB


Ch661/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 0.94dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
-25
10²
10³
10⁴

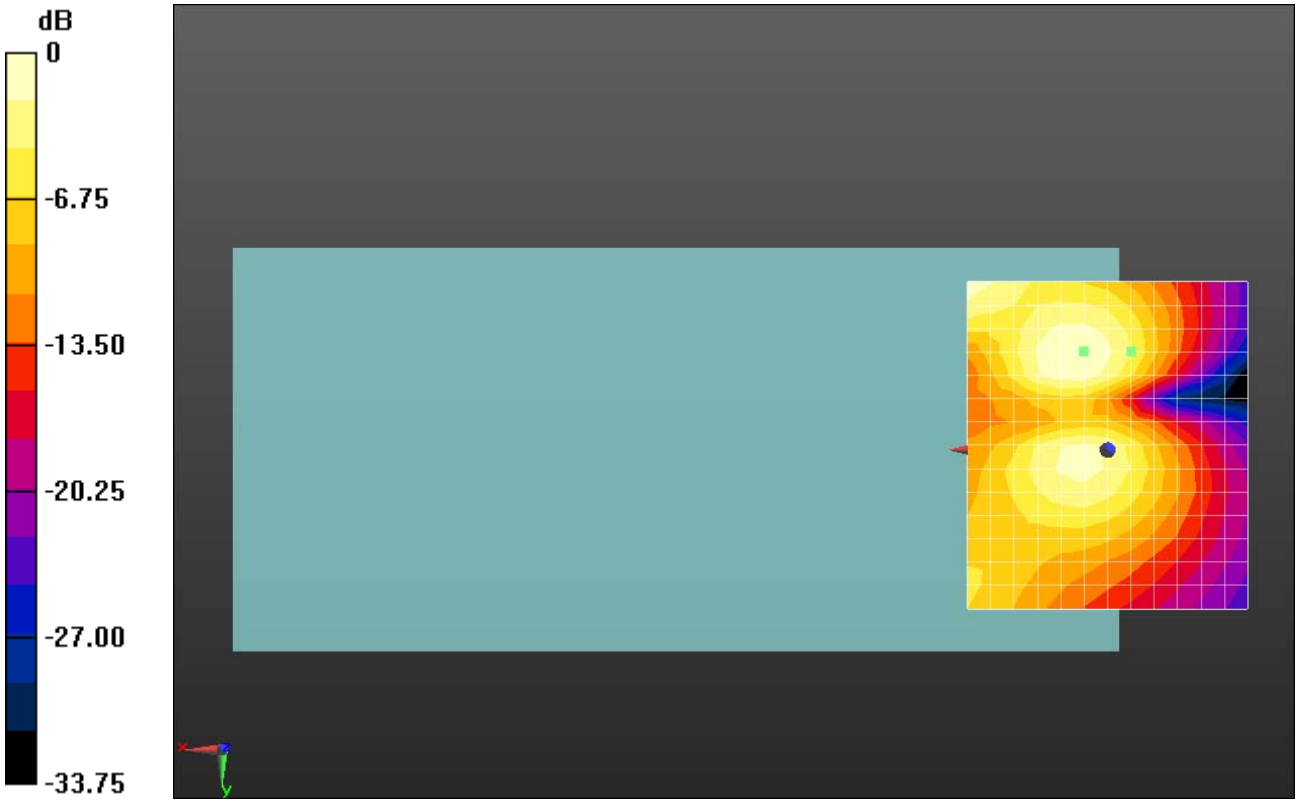
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.03

HAC_T-Coil_GSM1900_GSM Voice_Ch661_Y

Communication System: UID 0, Generic GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch661/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 25.09 dB
ABM1 comp = -16.79 dBA/m
BWC Factor = 0.18 dB
Location: -4.2, -17.5, 3.7 mm



0 dB = 17.96 = 25.09 dB

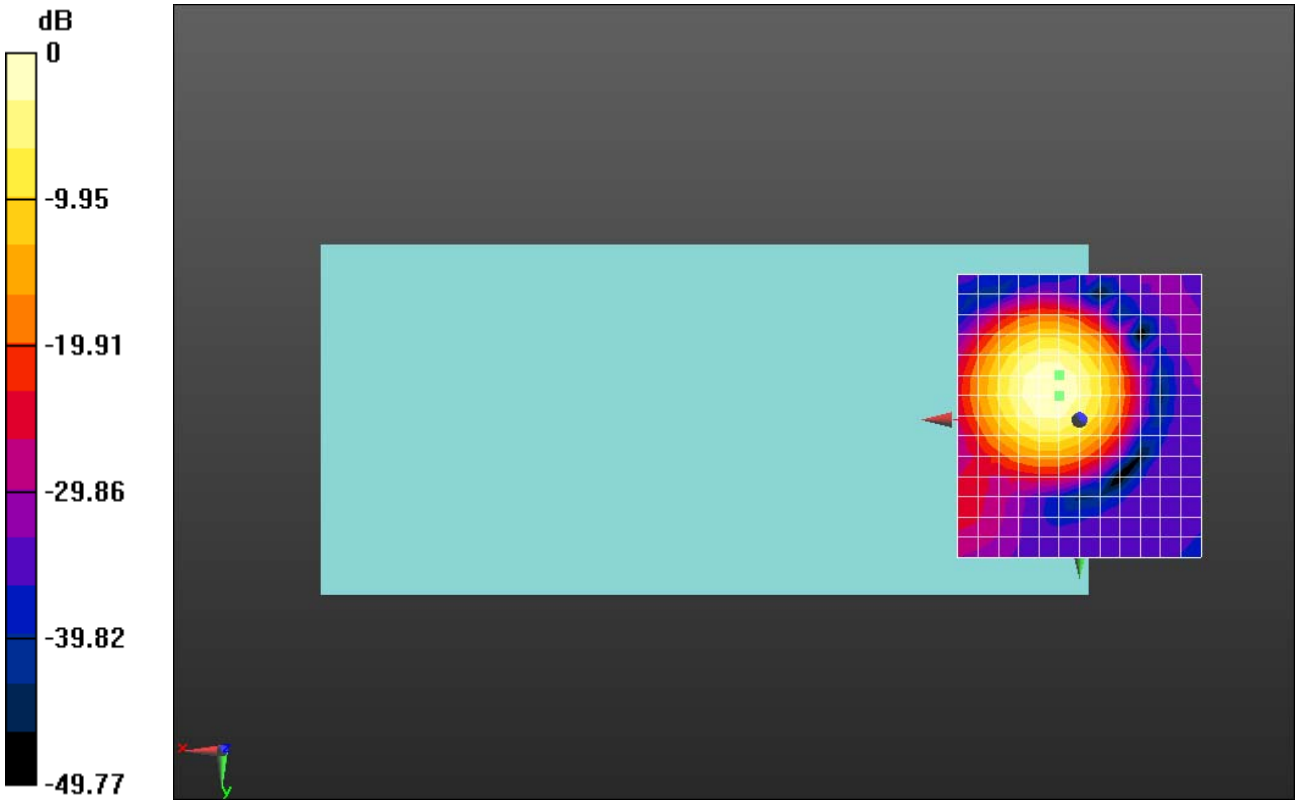
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.27

HAC_T-Coil_WCDMA Band II_AMR 12.12Kbps_Ch9400_Z

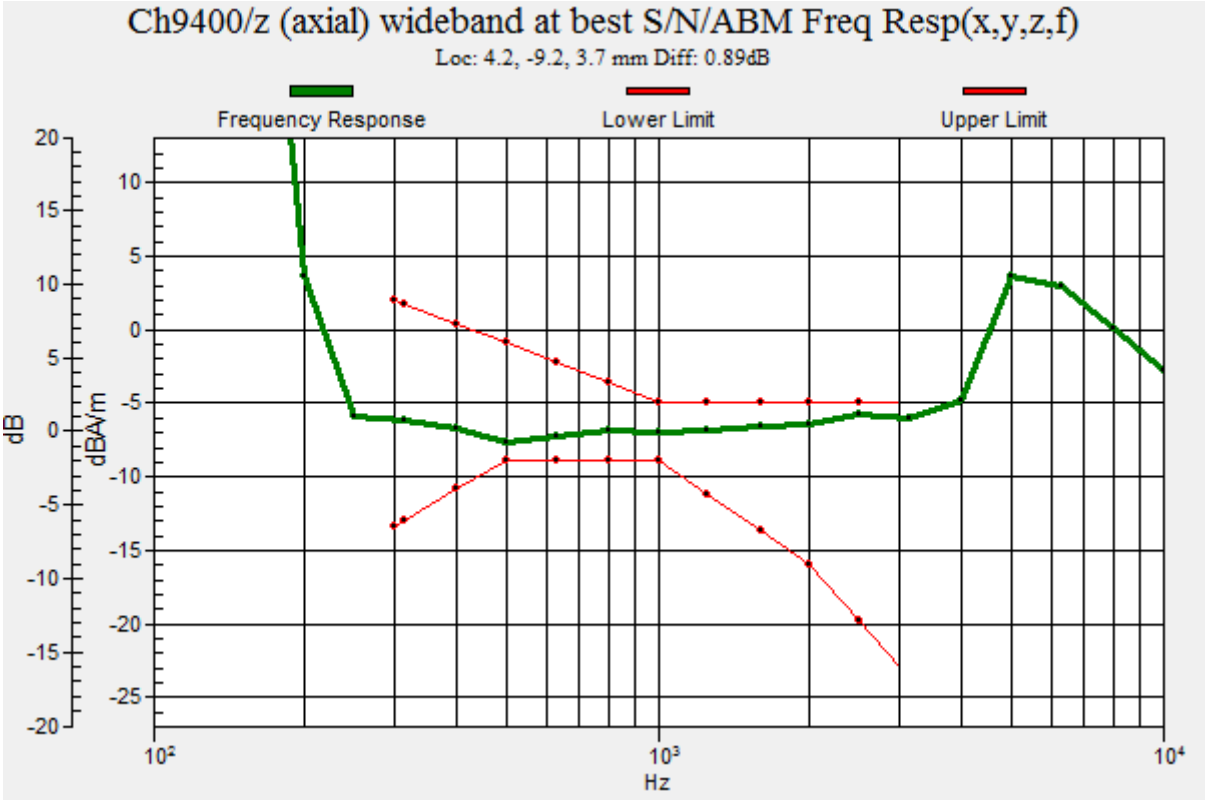
Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1880 MHz;Duty Cycle: 1:1.95434
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9400/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 39.87 dB
ABM1 comp = -5.90 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 98.52 = 39.87 dB


Ch9400/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 0.89dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
-25
10²
10³
10⁴

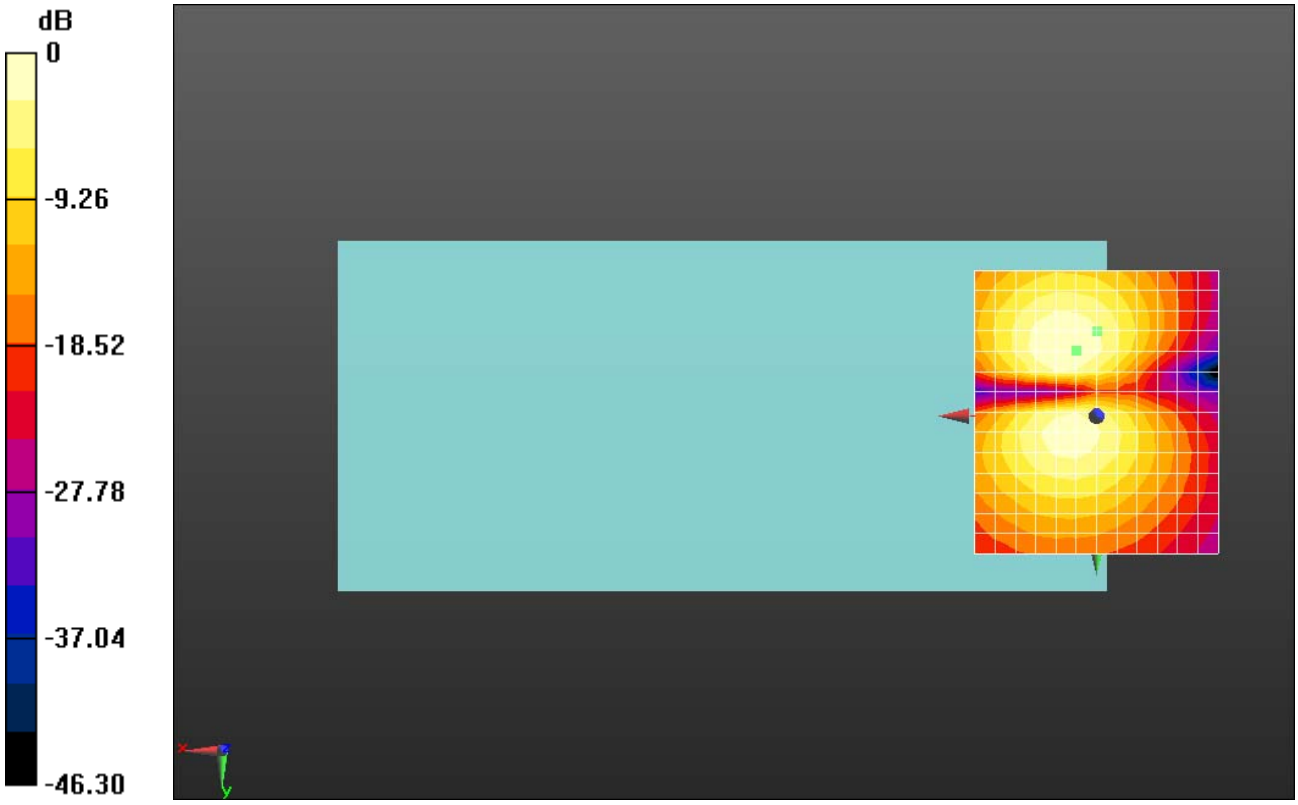
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.27

HAC_T-Coil_WCDMA Band II_AMR 12.12Kbps_Ch9400_Y

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1880 MHz;Duty Cycle: 1:1.95434
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch9400/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 35.41 dB
ABM1 comp = -15.03 dBA/m
BWC Factor = 0.17 dB
Location: 0, -17.5, 3.7 mm



0 dB = 58.93 = 35.41 dB

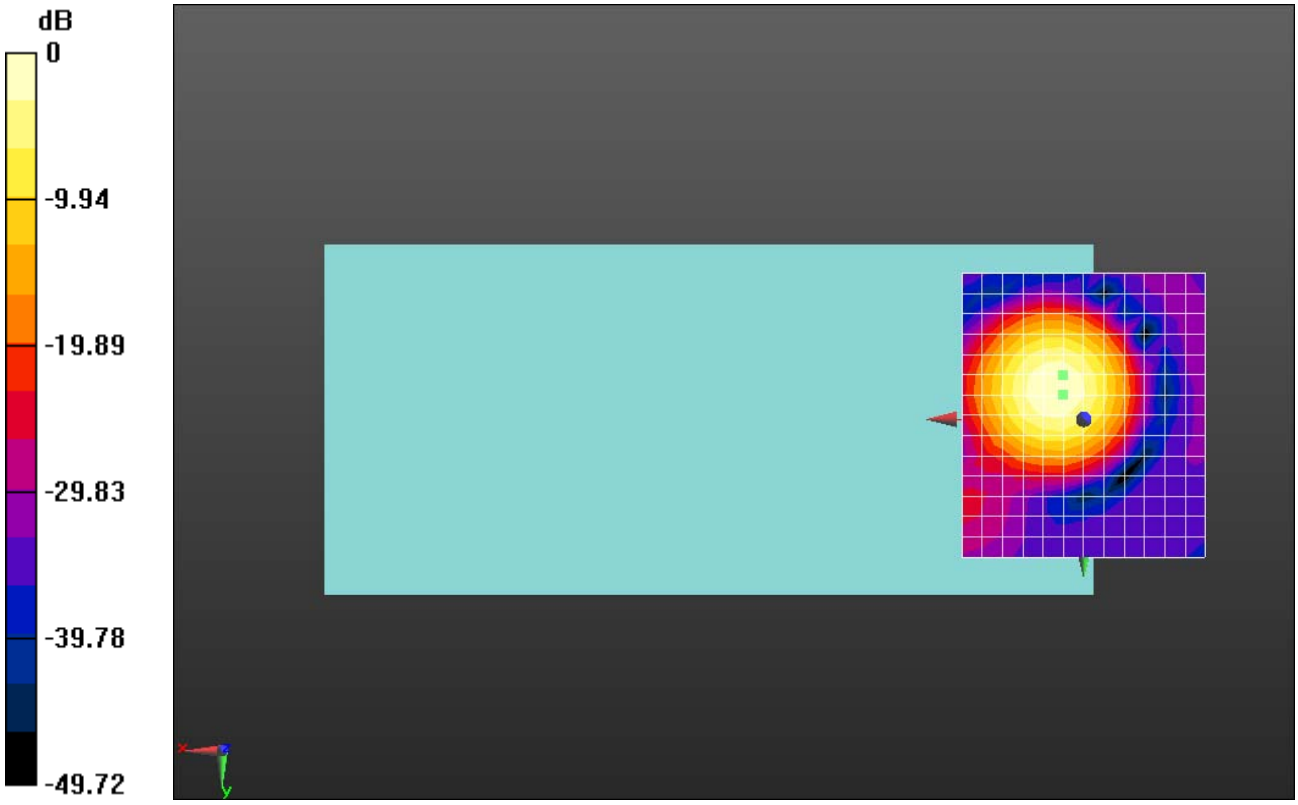
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.27

HAC_T-Coil_WCDMA Band IV_AMR 12.12Kbps_Ch1413_Z

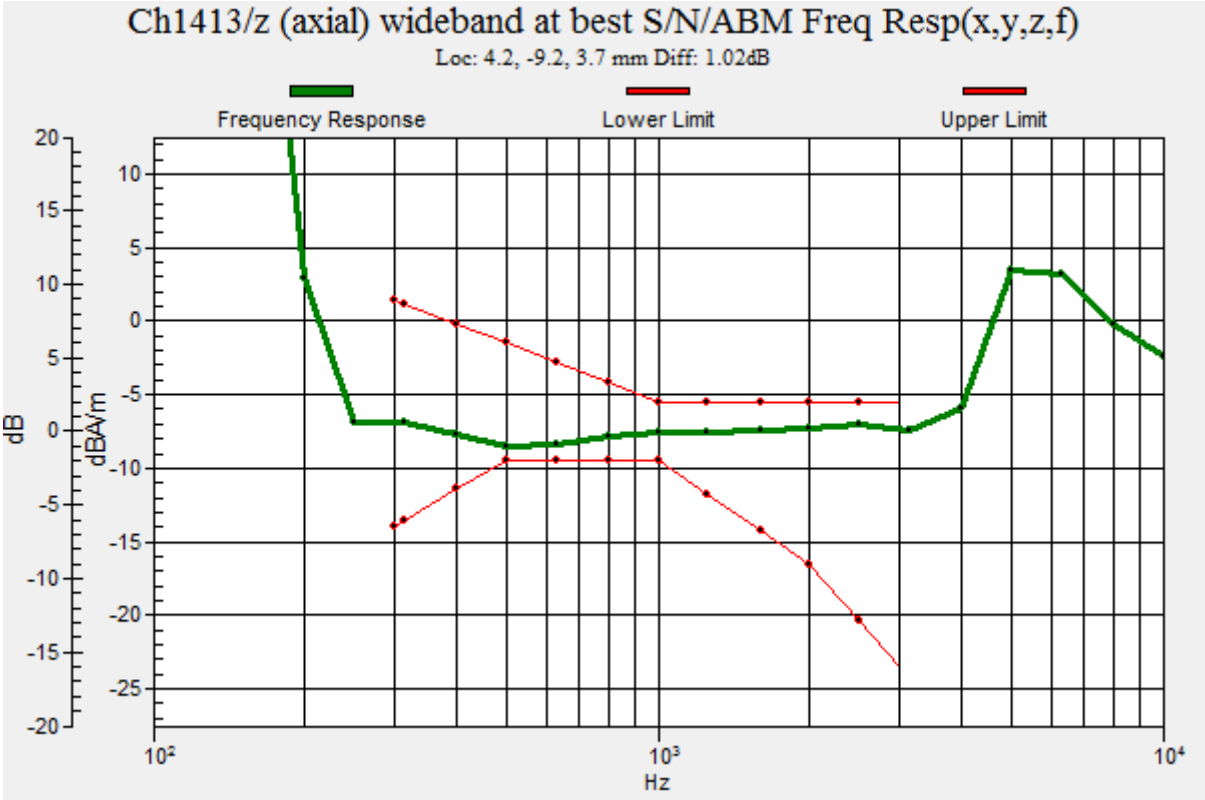
Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1732.4 MHz;Duty Cycle: 1:1.95434
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1413/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 40.13 dB
ABM1 comp = -6.06 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 101.5 = 40.13 dB


Ch1413/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 1.02dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
10²
10³
10⁴

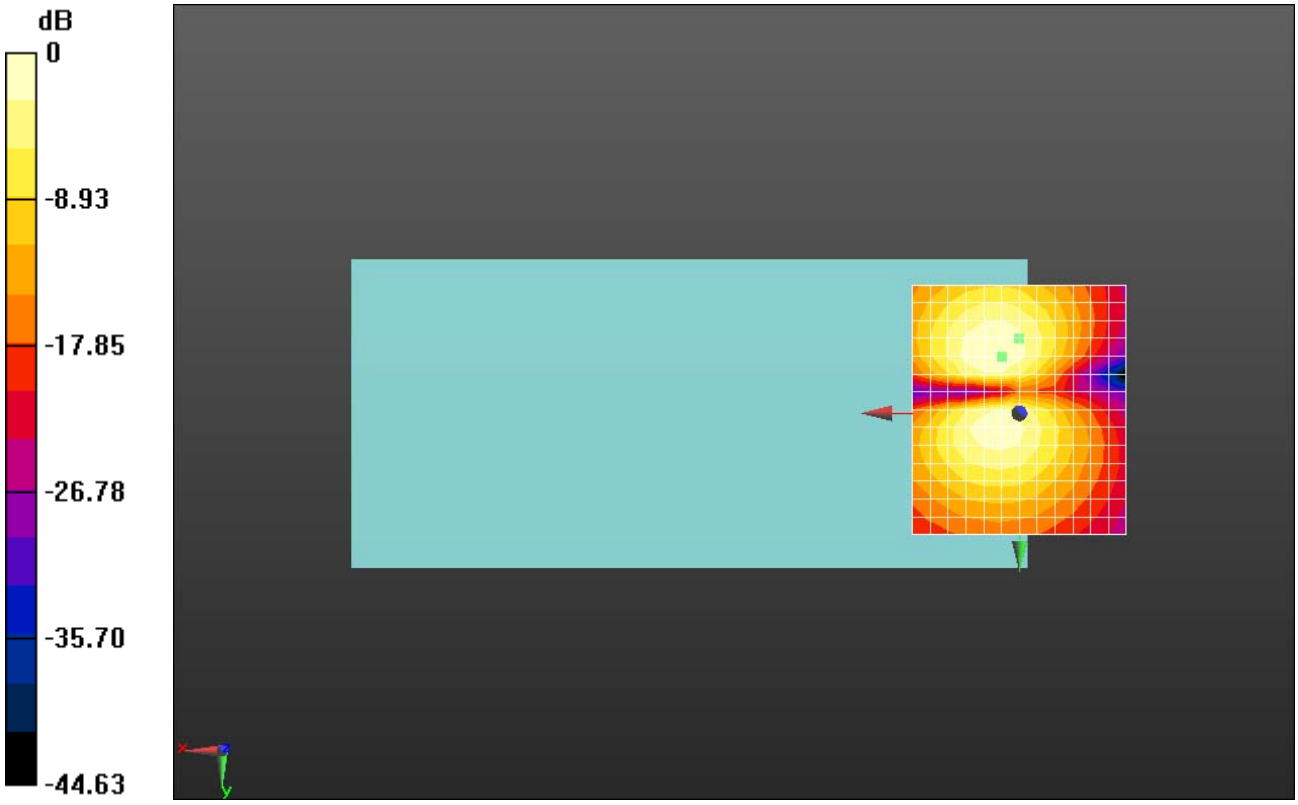
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.27

HAC_T-Coil_WCDMA Band IV_AMR 12.12Kbps_Ch1413_Y

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 1732.4 MHz;Duty Cycle: 1:1.95434
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch1413/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 35.35 dB
ABM1 comp = -14.70 dBA/m
BWC Factor = 0.17 dB
Location: 0, -17.5, 3.7 mm



0 dB = 58.52 = 35.35 dB

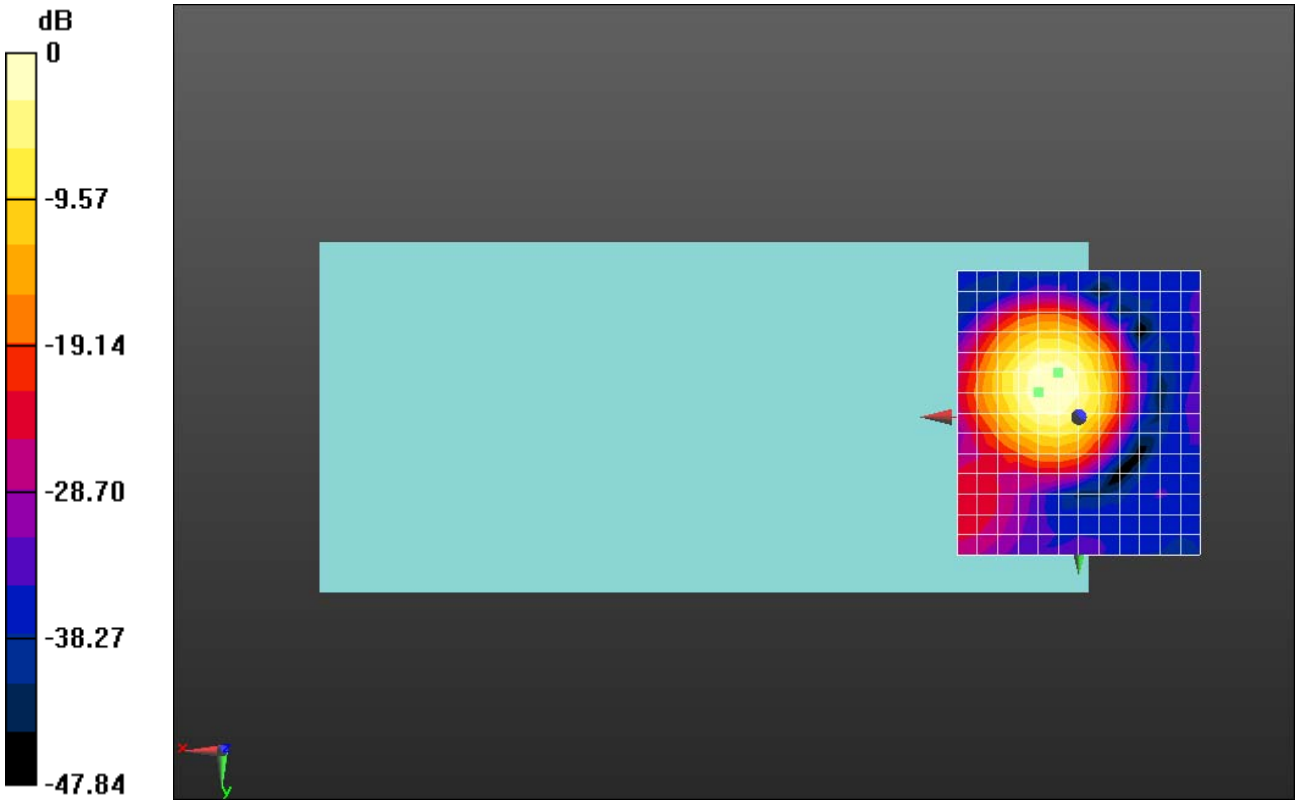
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.27

HAC_T-Coil_WCDMA Band V_AMR 12.12Kbps_Ch4182_Z

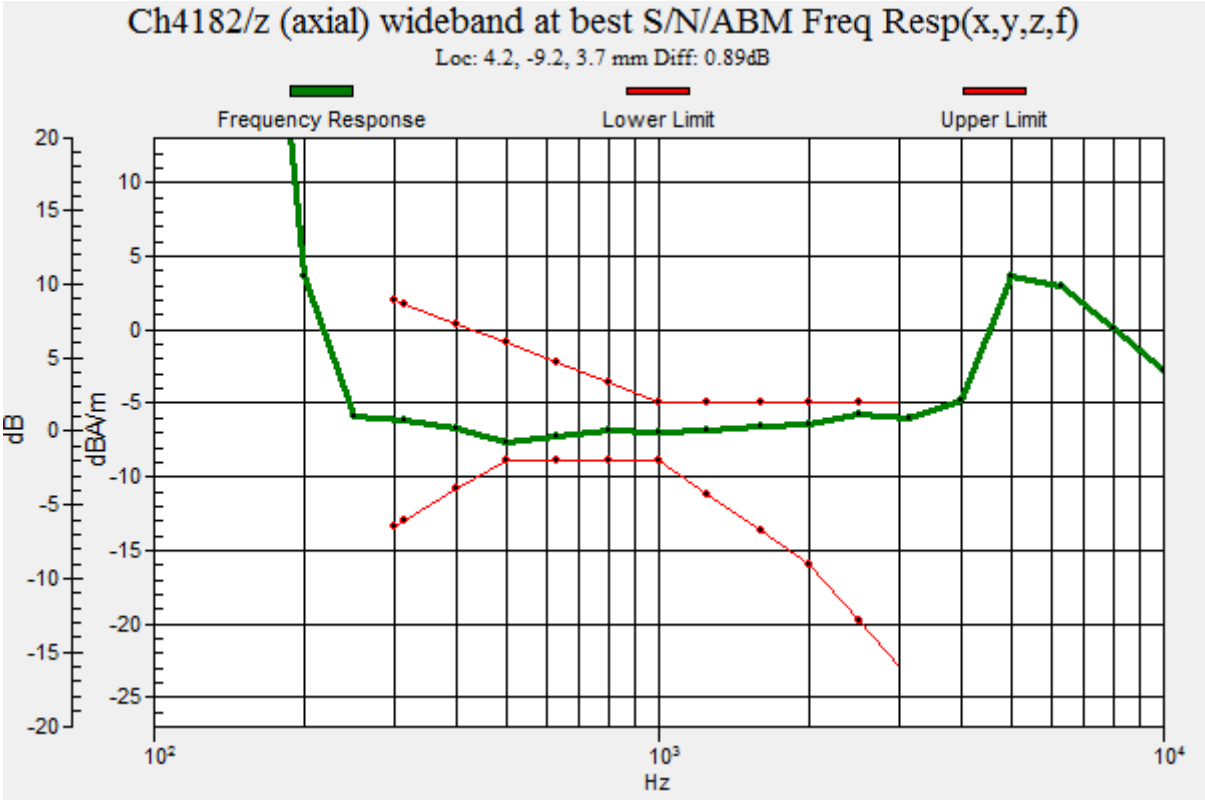
Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 836.4 MHz;Duty Cycle: 1:1.95434
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch4182/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 36.31 dB
ABM1 comp = -10.75 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 65.37 = 36.31 dB


Ch4182/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 0.89dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
10
5
0
-5
-10
-15
-20
-25
10²
10³
10⁴

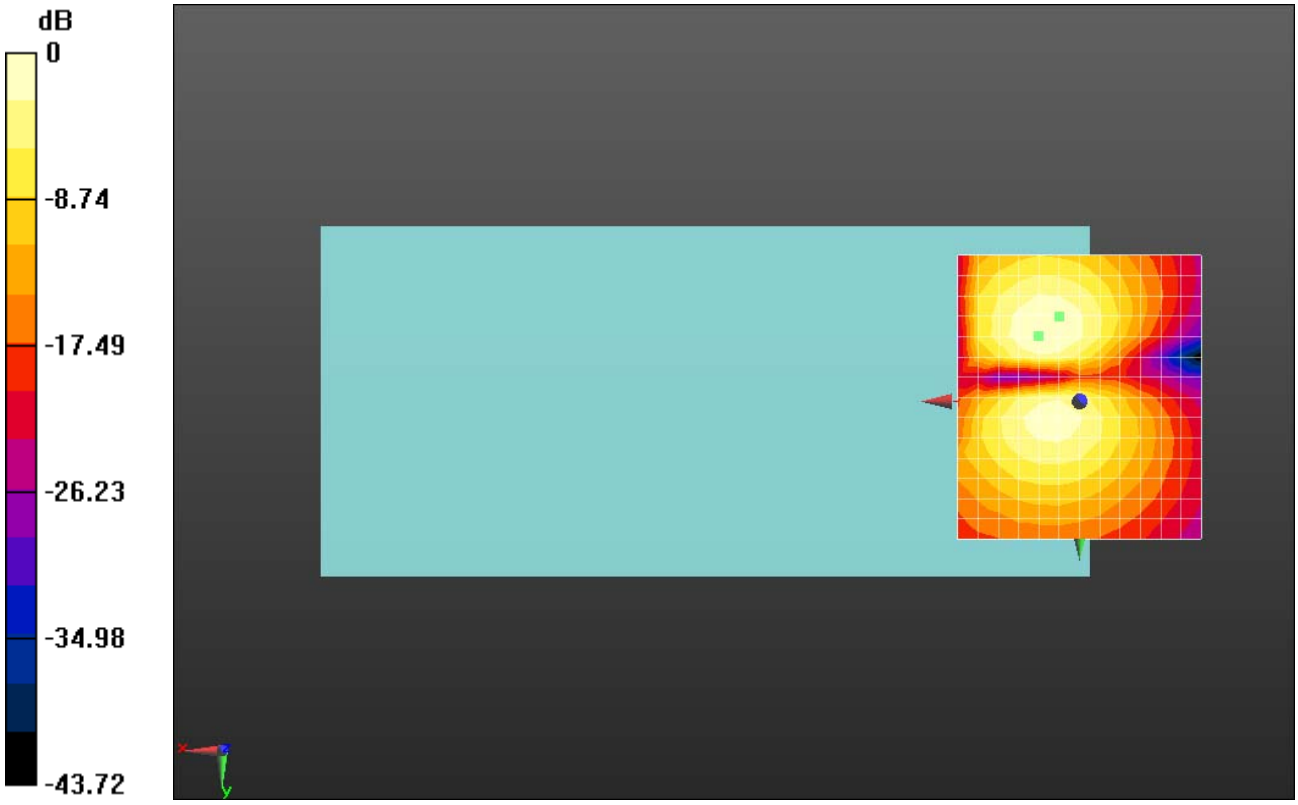
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.27

HAC_T-Coil_WCDMA Band V_AMR 12.12Kbps_Ch4182_Y

Communication System: UID 10011 - CAB, UMTS-FDD (WCDMA); Frequency: 836.4 MHz;Duty Cycle: 1:1.95434
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch4182/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 34.56 dB
ABM1 comp = -13.49 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -17.5, 3.7 mm



0 dB = 53.45 = 34.56 dB

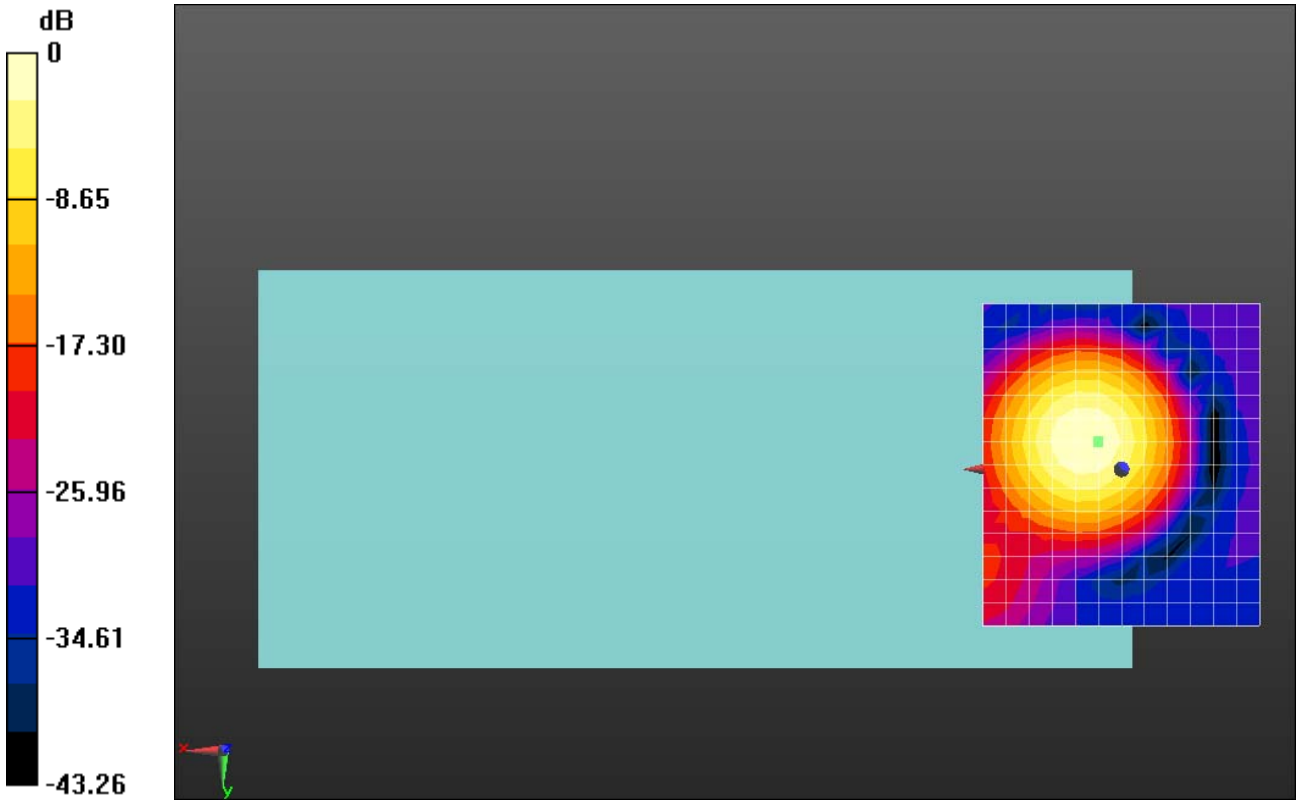
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 2_20M_QPSK_1RB_49offset_12.2Kbps_Ch18900_Z

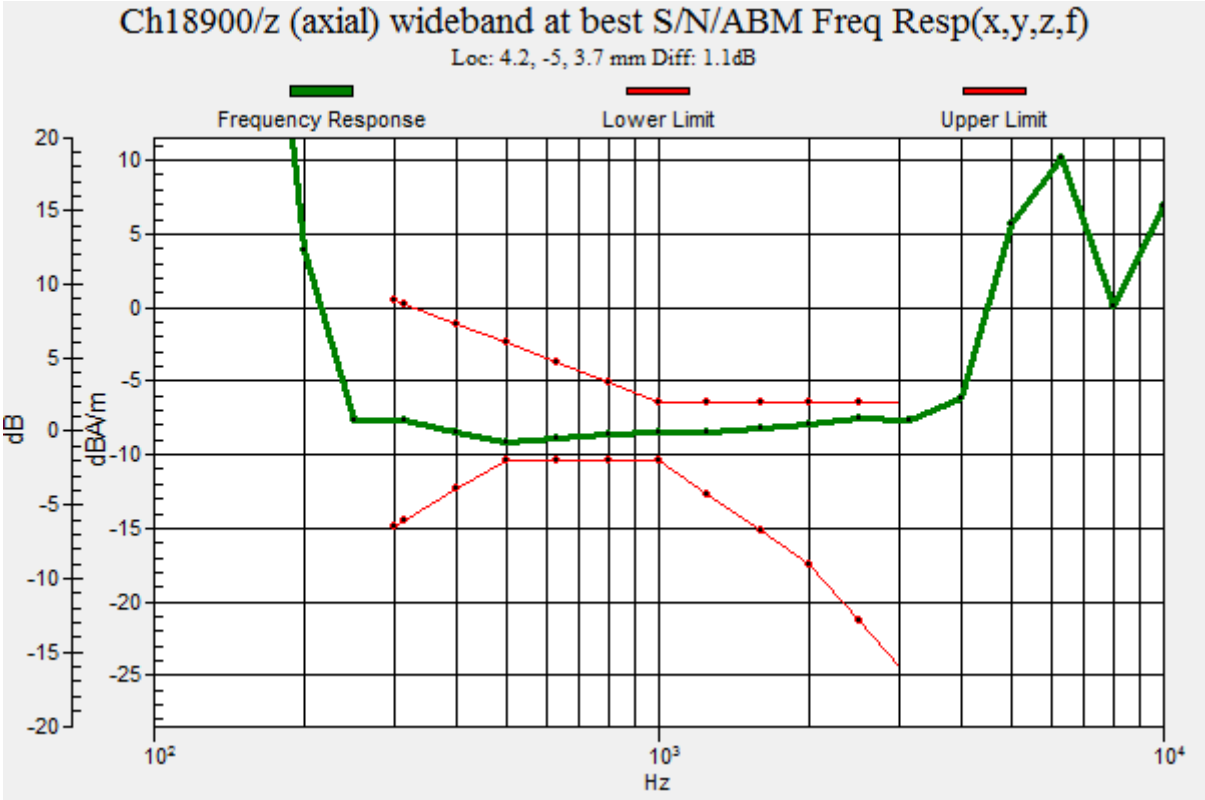
Communication System: UID 10169 - CAB, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1880 MHz;Duty Cycle: 1:3.74111
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch18900/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid:
dx=10mm, dy=10mm
ABM1/ABM2 = 33.00 dB
ABM1 comp = -7.04 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -5, 3.7 mm



0 dB = 44.69 = 33.00 dB


Ch18900/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -5, 3.7 mm Diff: 1.1dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
10
5
0
-5
-10
-15
-20
-25
10²
10³
10⁴

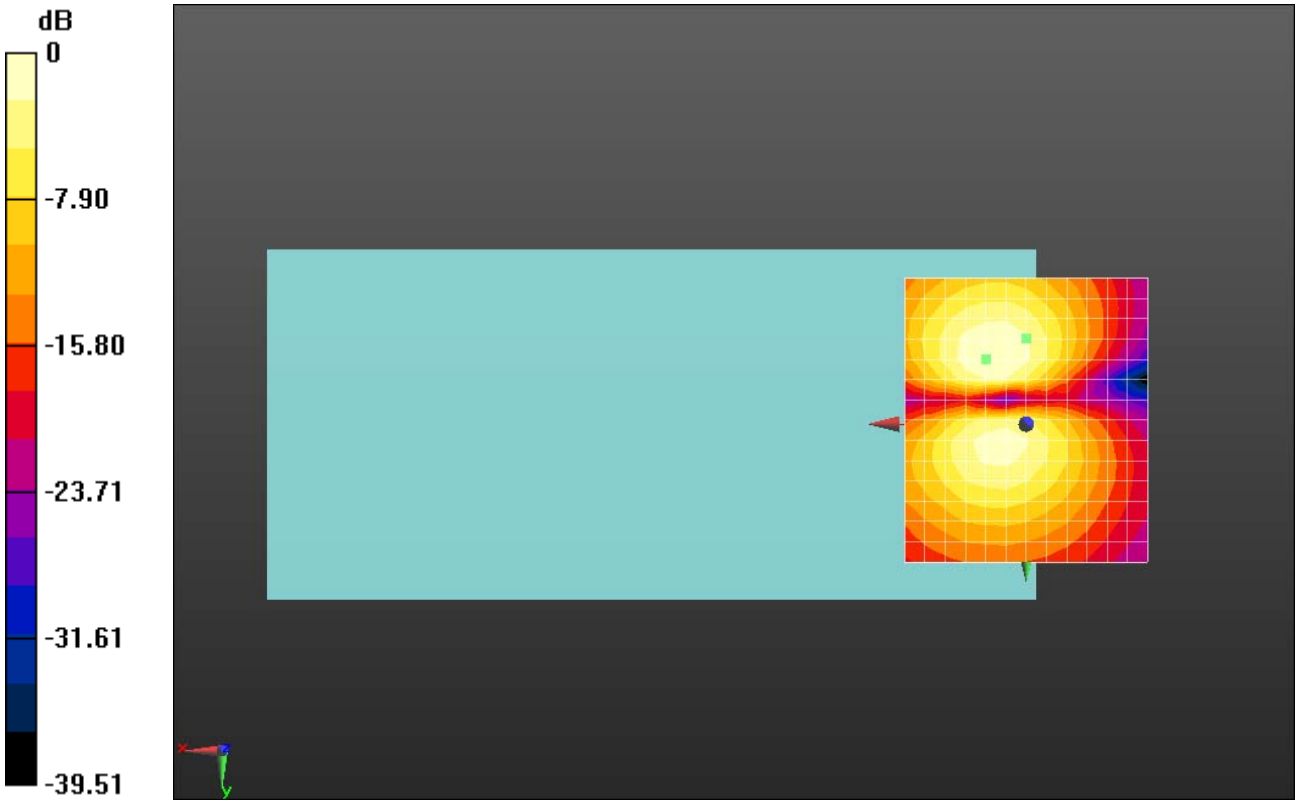
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 2_20M_QPSK_1RB_49offset_12.2Kbps_Ch18900_Y

Communication System: UID 10169 - CAB, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1880 MHz;Duty Cycle: 1:3.74111
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch18900/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 30.40 dB
ABM1 comp = -15.91 dBA/m
BWC Factor = 0.17 dB
Location: 0, -17.5, 3.7 mm



0 dB = 33.10 = 30.40 dB

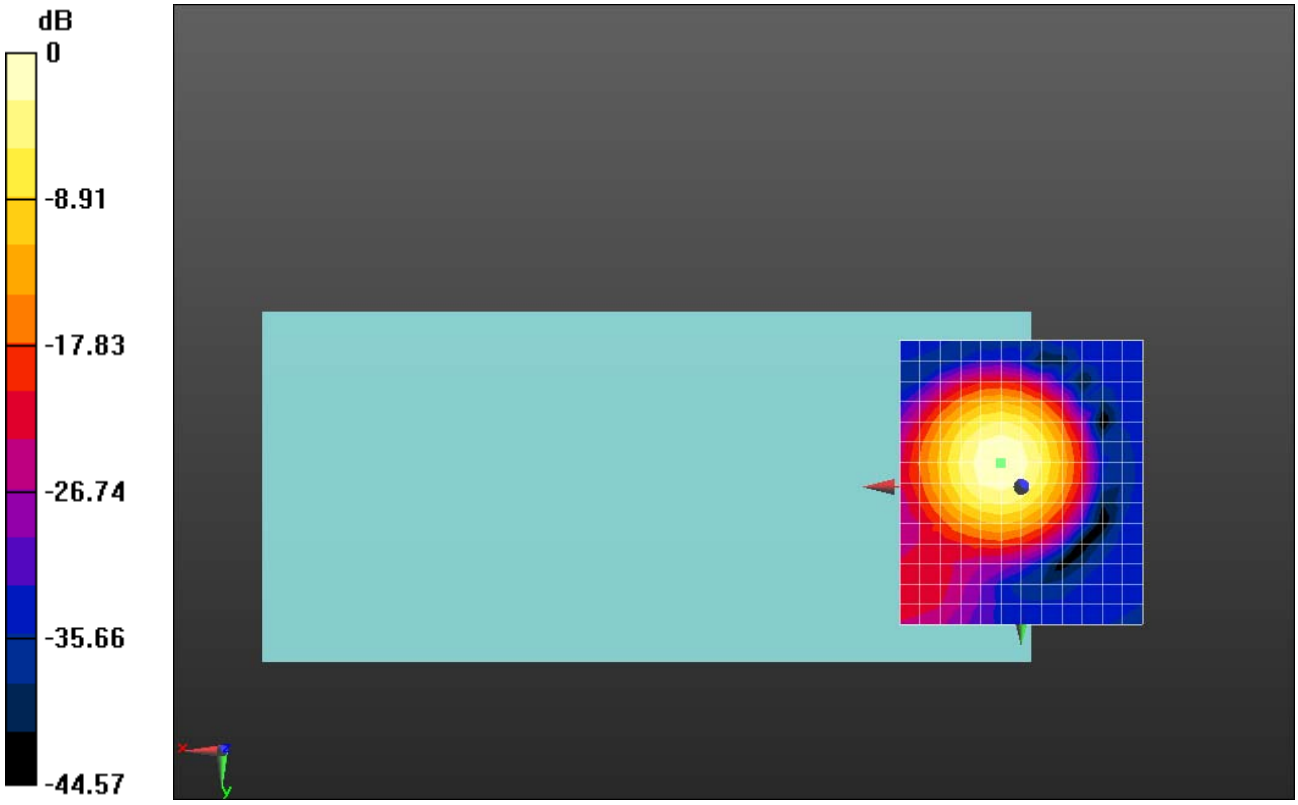
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 4_20M_QPSK_1RB_49offset_12.2Kbps_Ch20175_Z

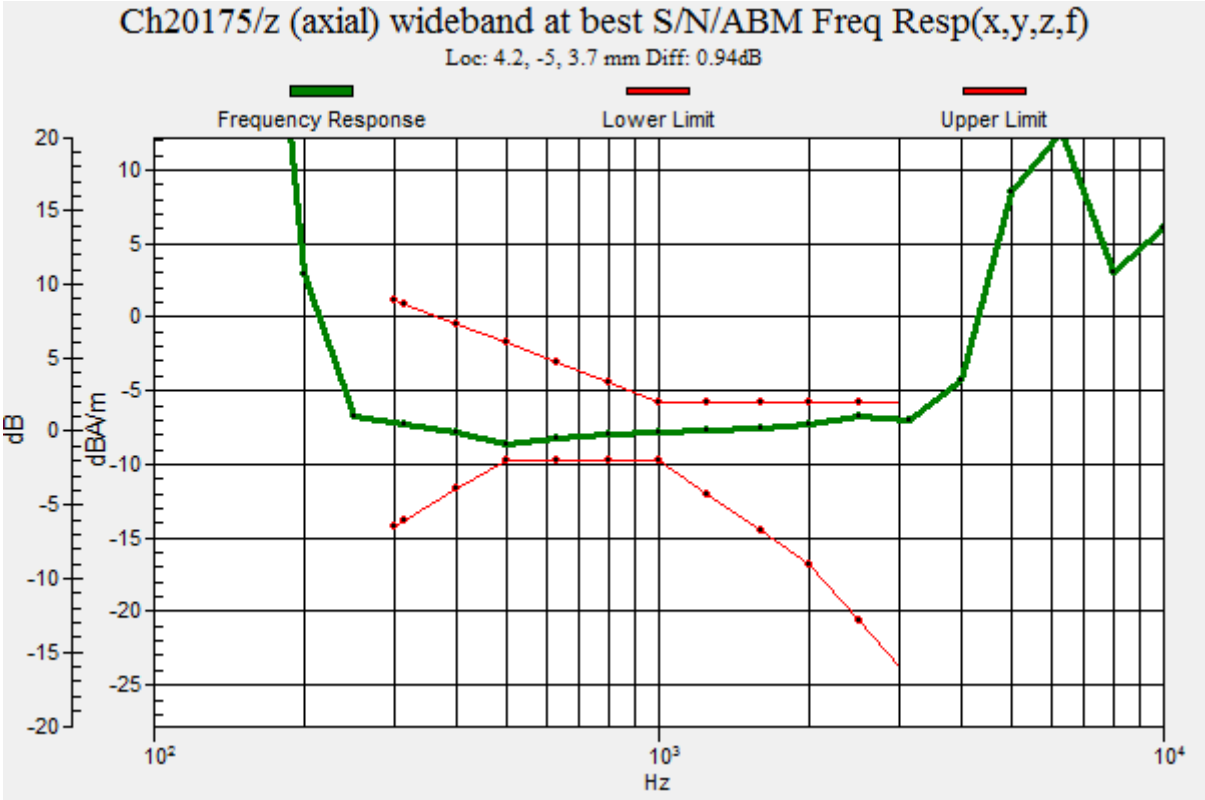
Communication System: UID 10169 - CAB, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1732.5 MHz;Duty Cycle: 1:3.74111
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20175/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 32.85 dB
ABM1 comp = -6.61 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -5, 3.7 mm



0 dB = 43.89 = 32.85 dB


Ch20175/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -5, 3.7 mm Diff: 0.94dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
10
5
0
-5
-10
-15
-20
-25
10²
10³
10⁴

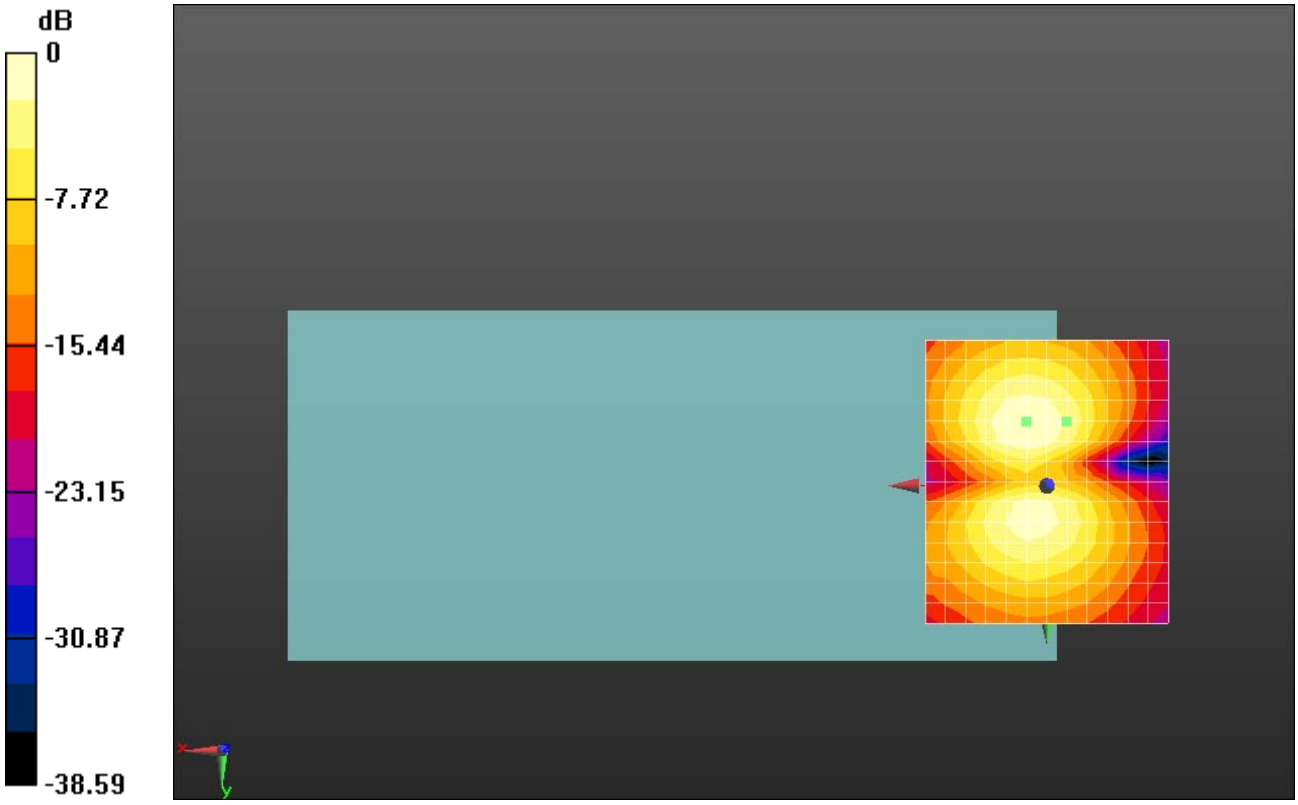
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 4_20M_QPSK_1RB_49offset_12.2Kbps_Ch20175_Y

Communication System: UID 10169 - CAB, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1732.5 MHz;Duty Cycle: 1:3.74111
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20175/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 29.08 dB
ABM1 comp = -16.57 dBA/m
BWC Factor = 0.17 dB
Location: -4.2, -13.3, 3.7 mm



0 dB = 28.44 = 29.08 dB

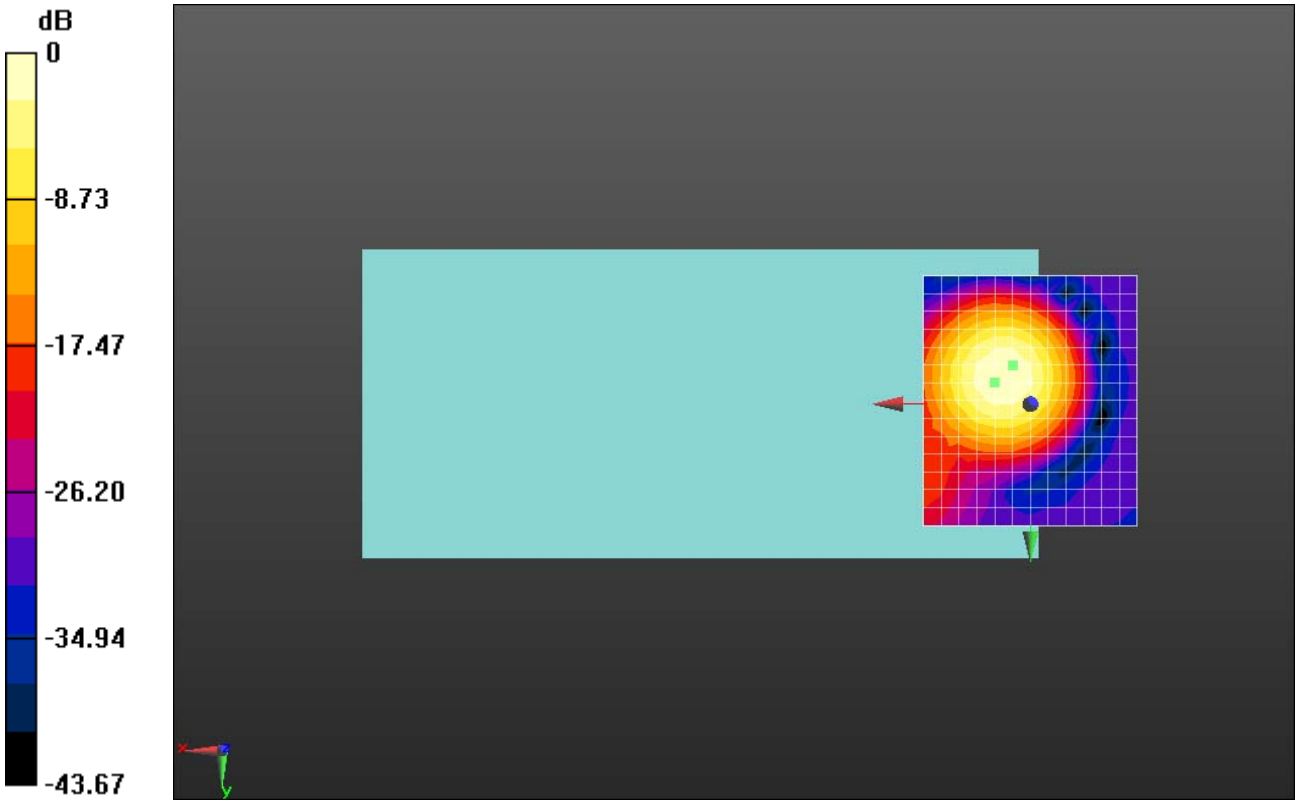
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 5_10M_QPSK_1RB_25offset_12.2Kbps_Ch20525_Z

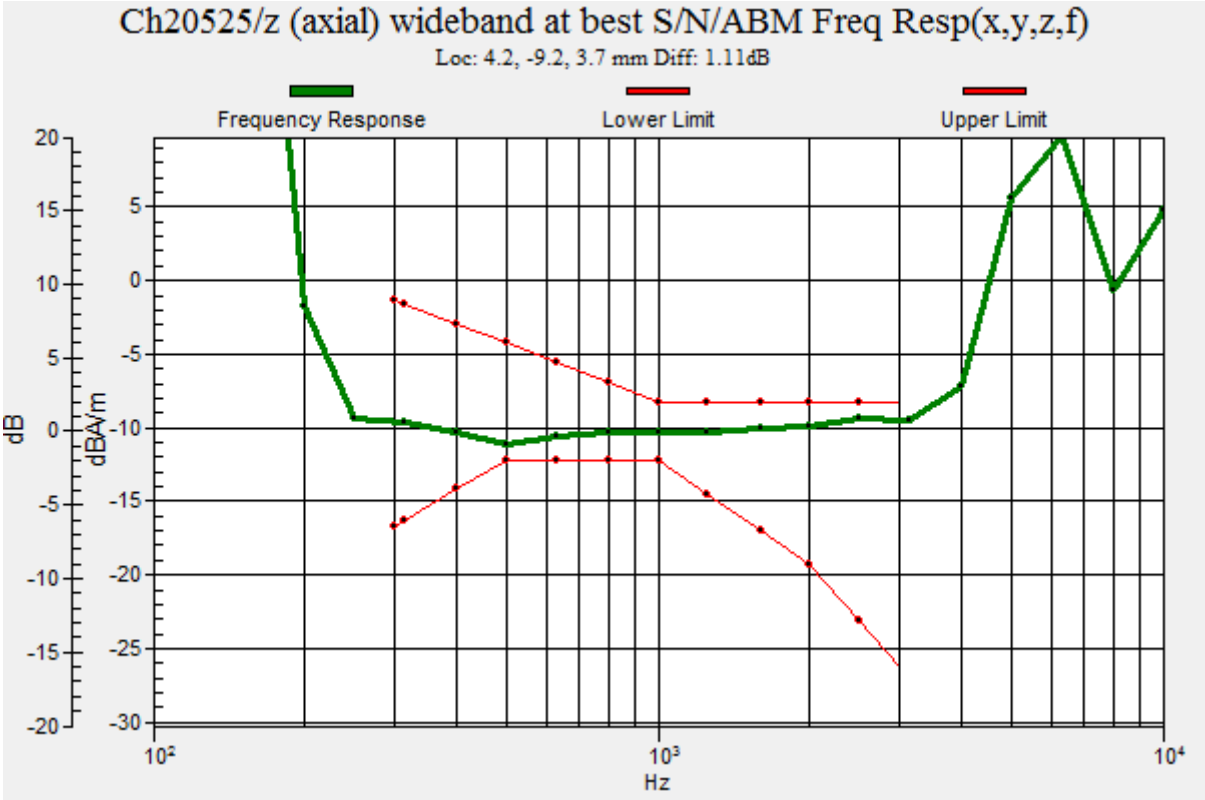
Communication System: UID 10175 - CAB, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 836.5 MHz;Duty Cycle: 1:3.7325
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20525/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 32.54 dB
ABM1 comp = -9.33 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 42.38 = 32.54 dB


Ch20525/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 1.11dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
5
0
-5
-10
-15
-20
-25
-30
10²
10³
10⁴

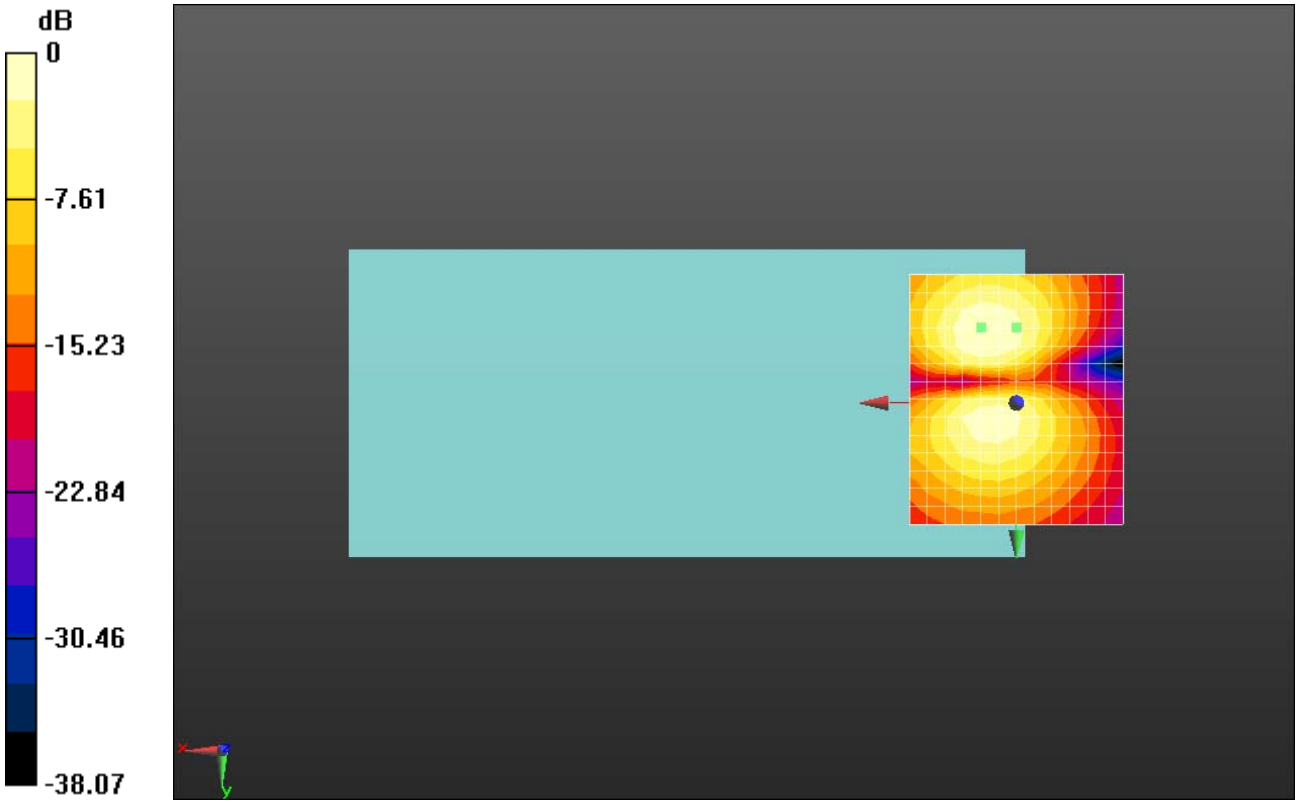
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 5_10M_QPSK_1RB_25offset_12.2Kbps_Ch20525_Y

Communication System: UID 10175 - CAB, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 836.5 MHz;Duty Cycle: 1:3.7325
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch20525/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 28.00 dB
ABM1 comp = -17.74 dBA/m
BWC Factor = 0.18 dB
Location: 0, -17.5, 3.7 mm



0 dB = 25.13 = 28.00 dB

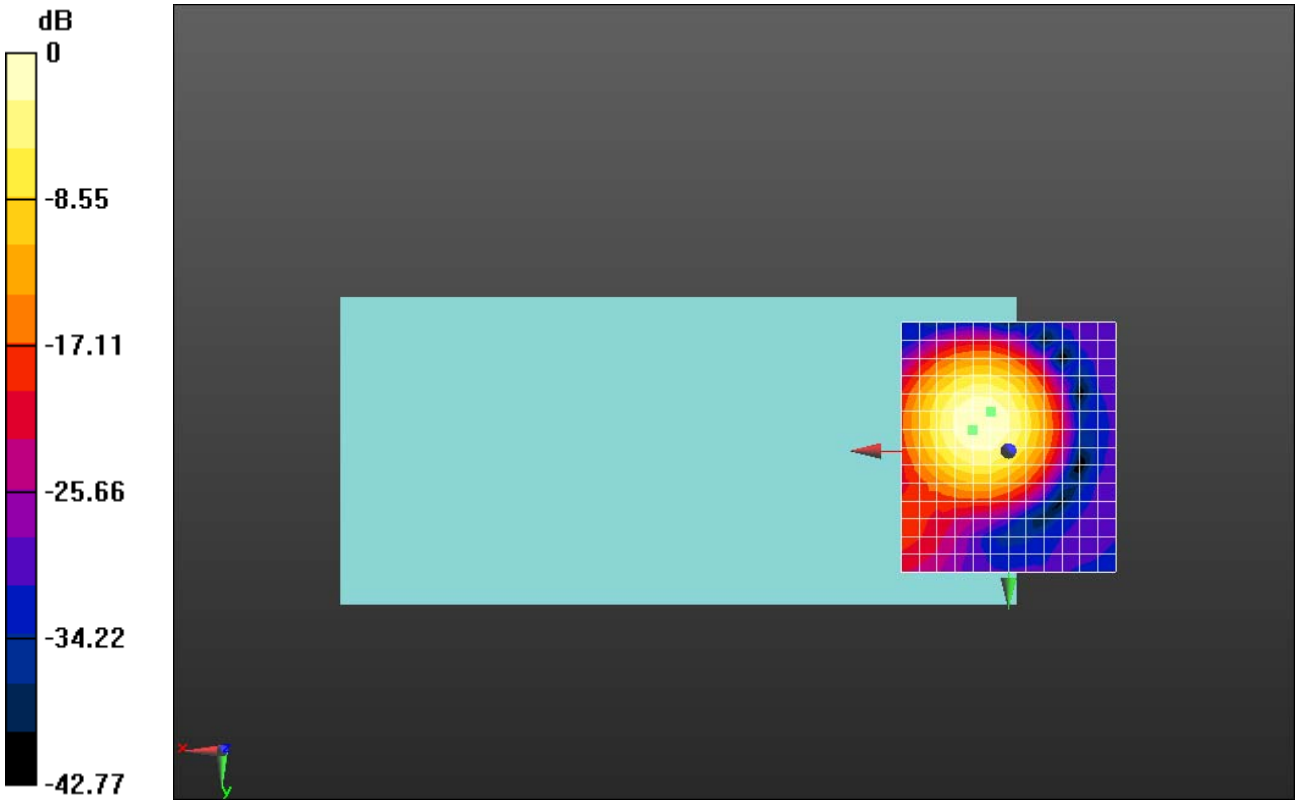
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 12_10M_QPSK_1RB_25offset_12.2Kbps_Ch23095_Z

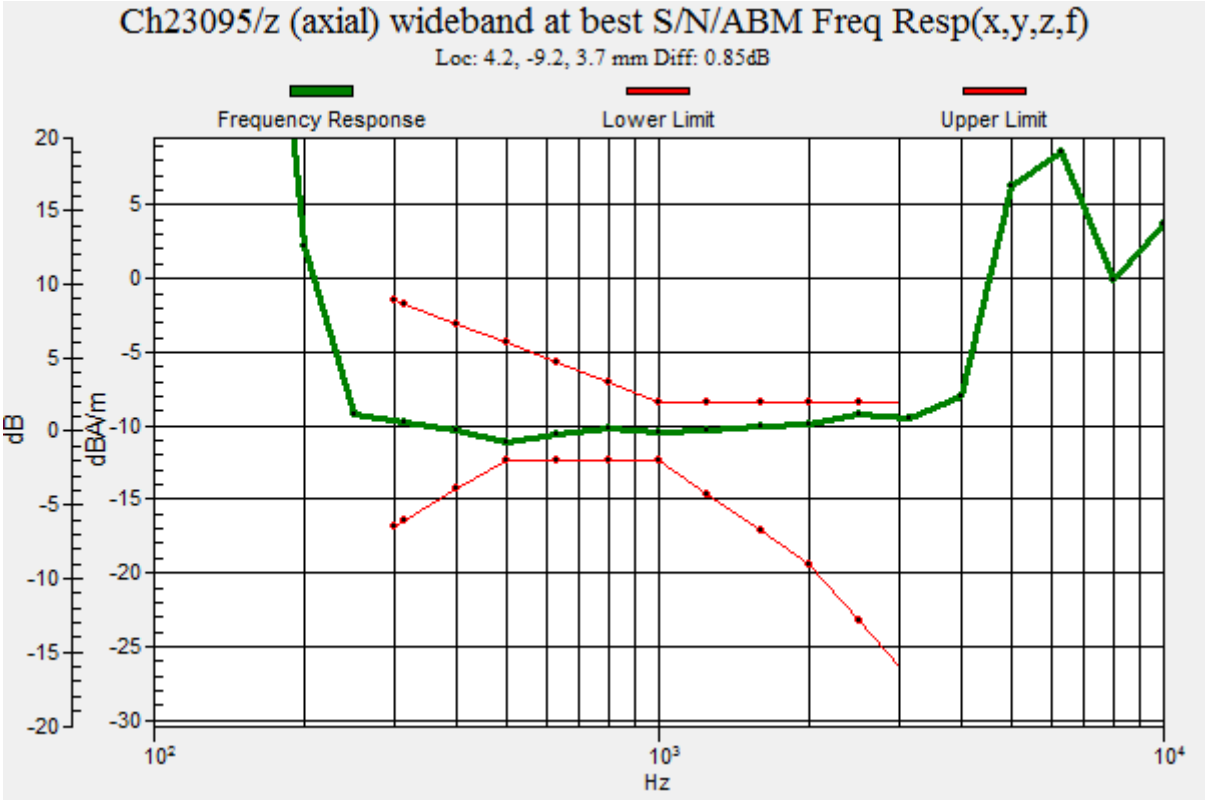
Communication System: UID 10175 - CAB, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 707.5 MHz;Duty Cycle: 1:3.7325
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch23095/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid:
dx=10mm, dy=10mm
ABM1/ABM2 = 32.68 dB
ABM1 comp = -9.18 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 43.07 = 32.68 dB


Ch23095/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 0.85dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
5
0
-5
-10
-15
-20
-25
-30
10²
10³
10⁴

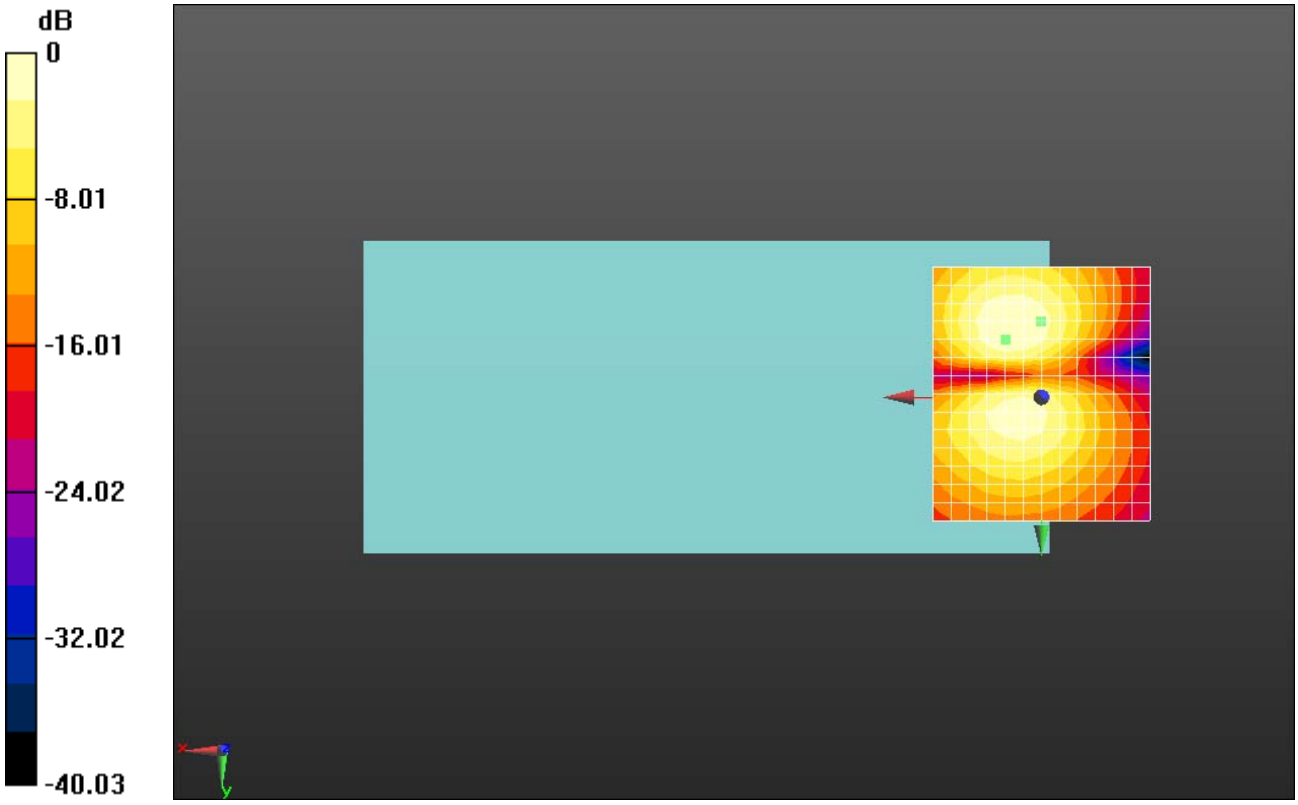
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 12_10M_QPSK_1RB_25offset_12.2Kbps_Ch23095_Y

Communication System: UID 10175 - CAB, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 707.5 MHz;Duty Cycle: 1:3.7325
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch23095/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 29.32 dB
ABM1 comp = -17.34 dBA/m
BWC Factor = 0.17 dB
Location: 0, -17.5, 3.7 mm



0 dB = 29.26 = 29.33 dB

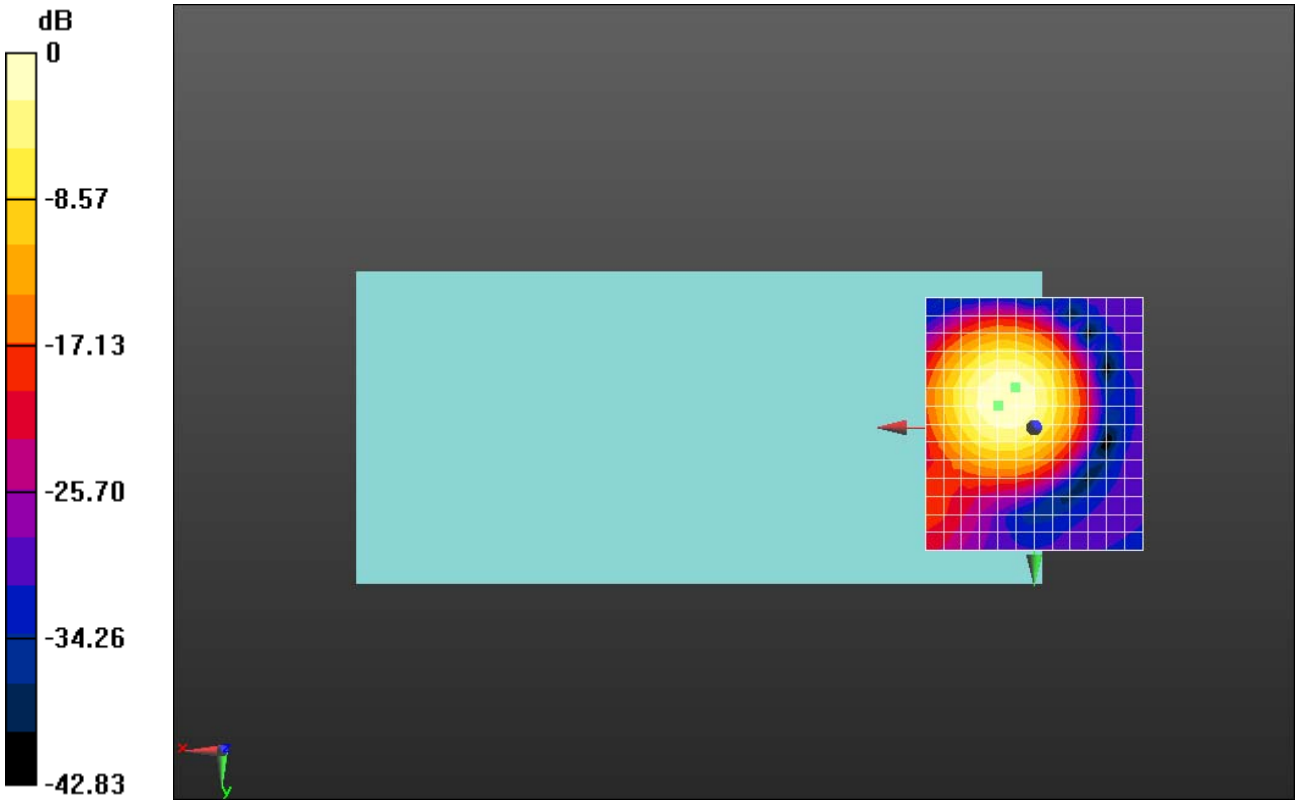
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 17_10M_QPSK_1RB_25offset_12.2Kbps_Ch23790_Z

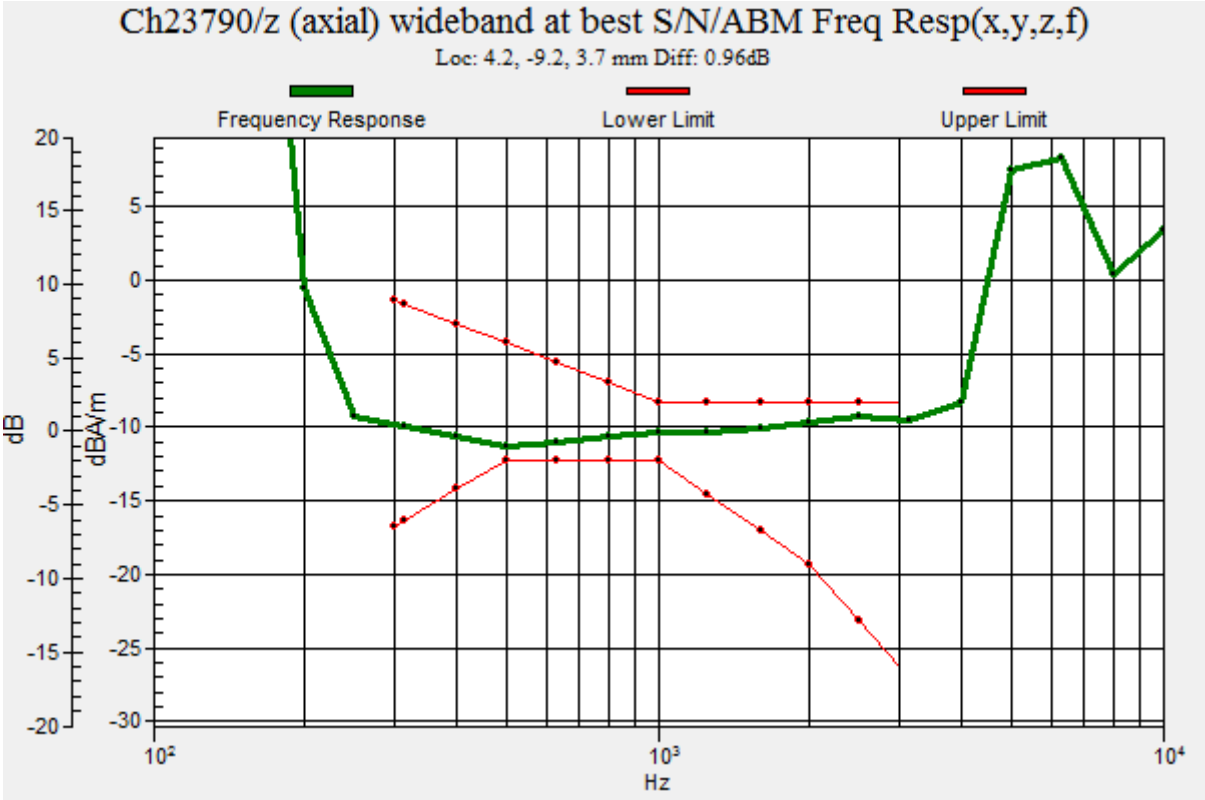
Communication System: UID 10175 - CAB, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 710 MHz;Duty Cycle: 1:3.7325
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch23790/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid:
dx=10mm, dy=10mm
ABM1/ABM2 = 32.53 dB
ABM1 comp = -9.19 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 42.31 = 32.53 dB


Ch23790/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 0.96dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
5
0
-5
-10
-15
-20
-25
-30
10²
10³
10⁴

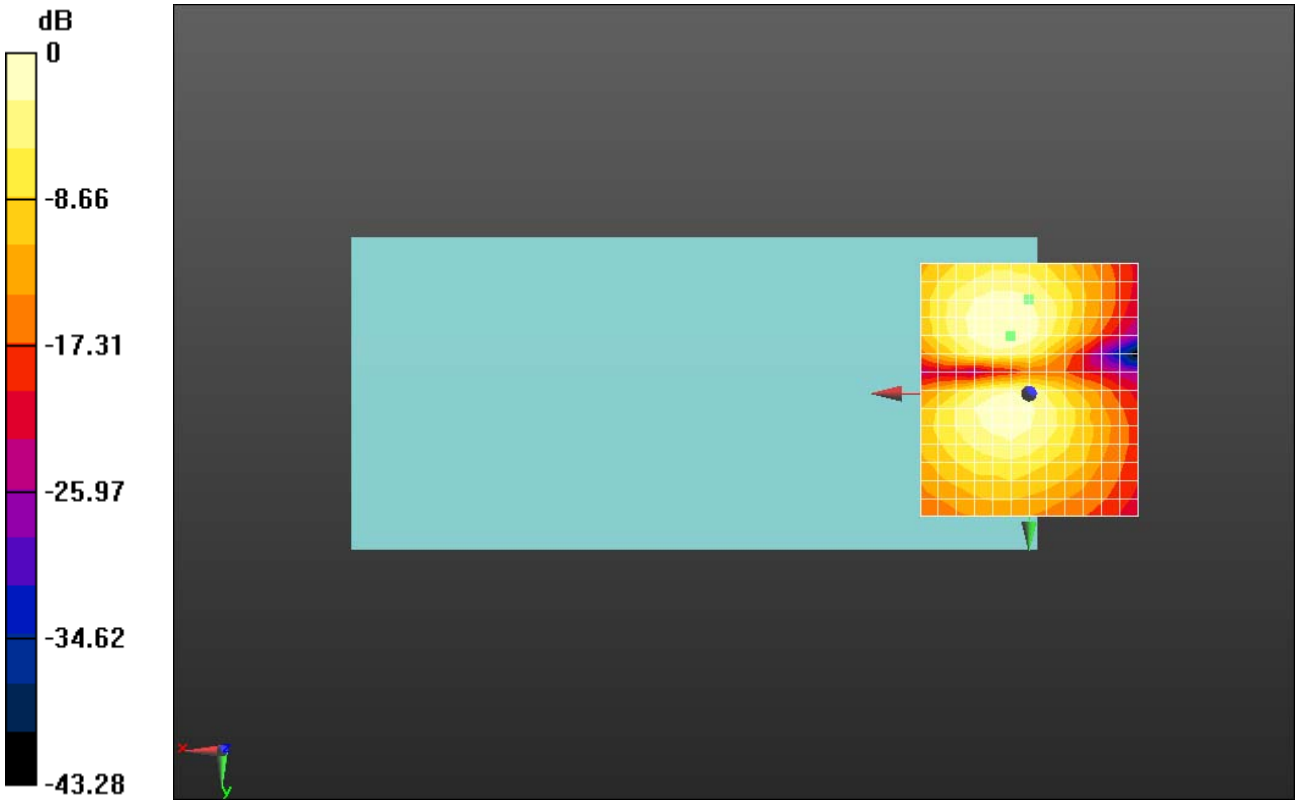
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.30

HAC_T-Coil_LTE Band 17_10M_QPSK_1RB_25offset_12.2Kbps_Ch23790_Y

Communication System: UID 10175 - CAB, LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK);
Frequency: 710 MHz;Duty Cycle: 1:3.7325
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch23790/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 32.47 dB
ABM1 comp = -16.23 dBA/m
BWC Factor = 0.18 dB
Location: 0, -21.7, 3.7 mm



0 dB = 42.01 = 32.47 dB

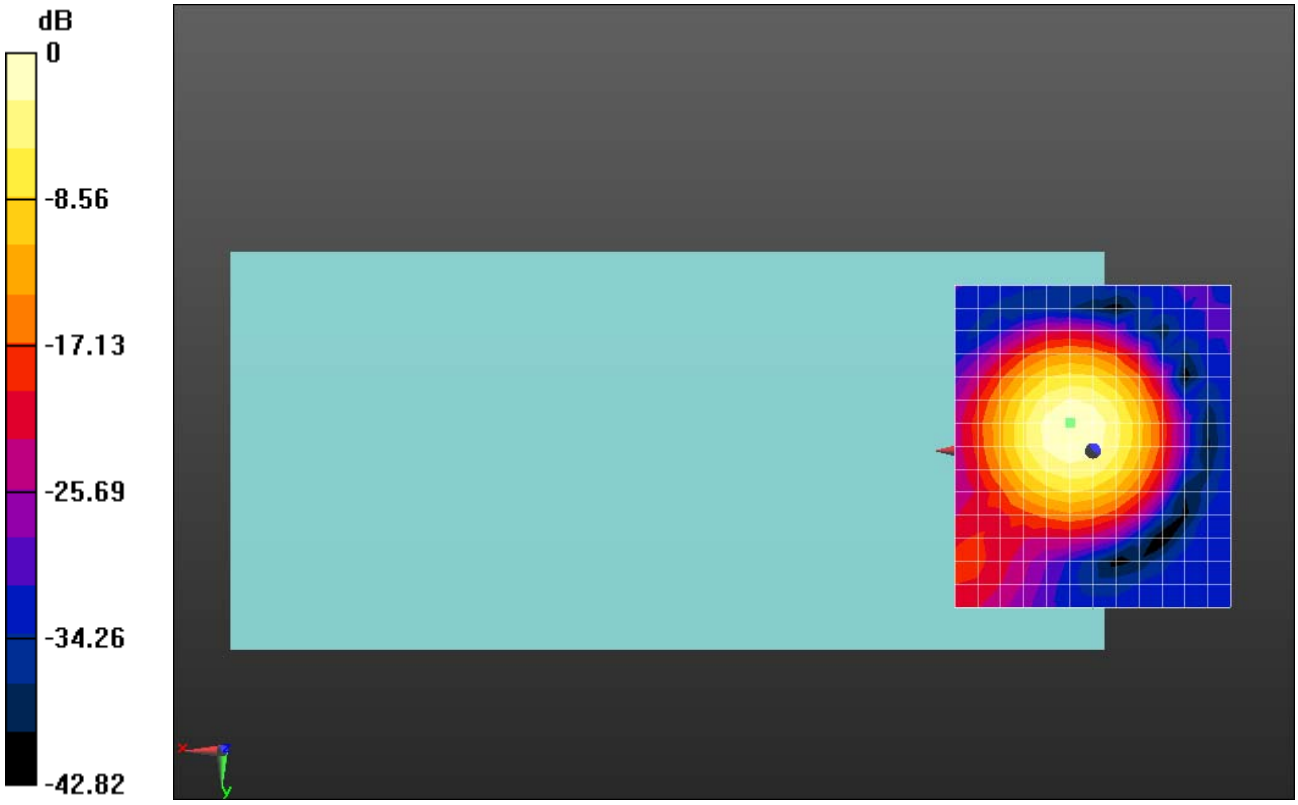
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 25_20M_QPSK_1RB_49offset_12.2Kbps_Ch26365_Z

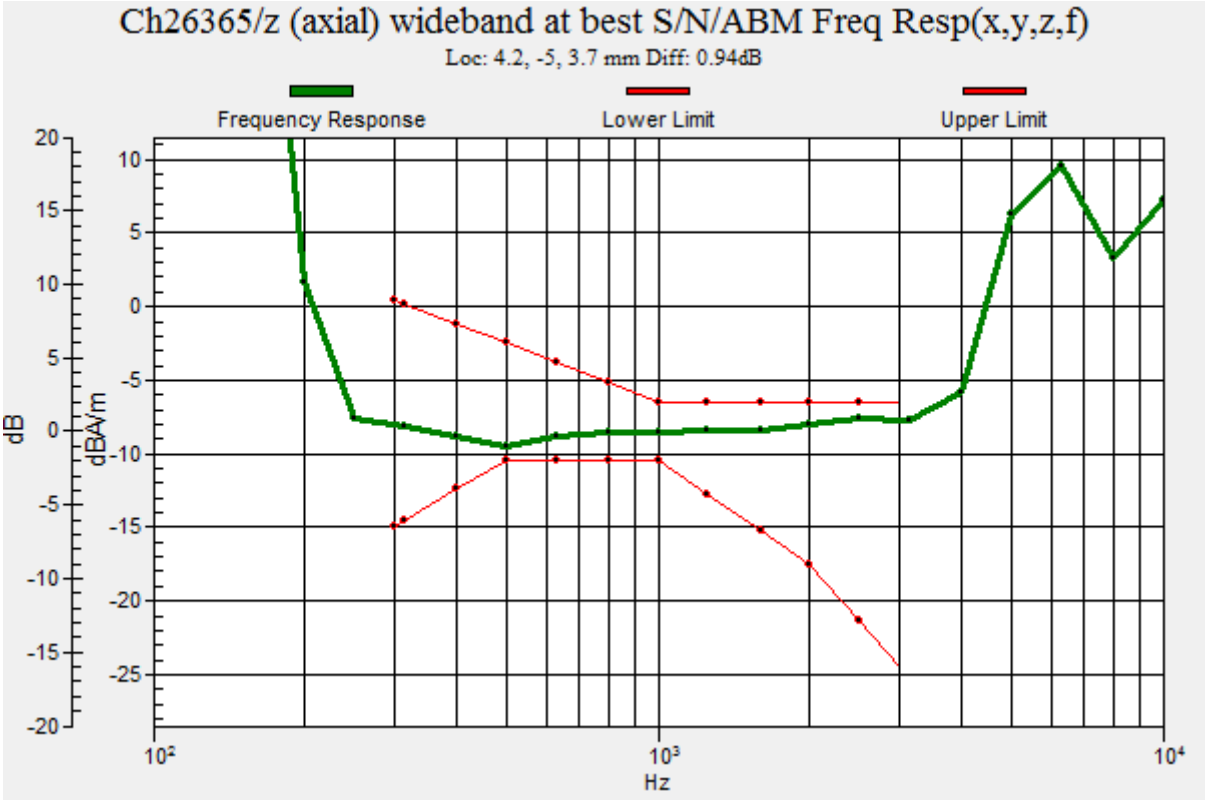
Communication System: UID 10169 - CAB, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1882.5 MHz;Duty Cycle: 1:3.74111
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch26365/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 33.39 dB
ABM1 comp = -6.73 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -5, 3.7 mm



0 dB = 46.74 = 33.39 dB


Ch26365/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -5, 3.7 mm Diff: 0.94dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
-25
10²
10³
10⁴

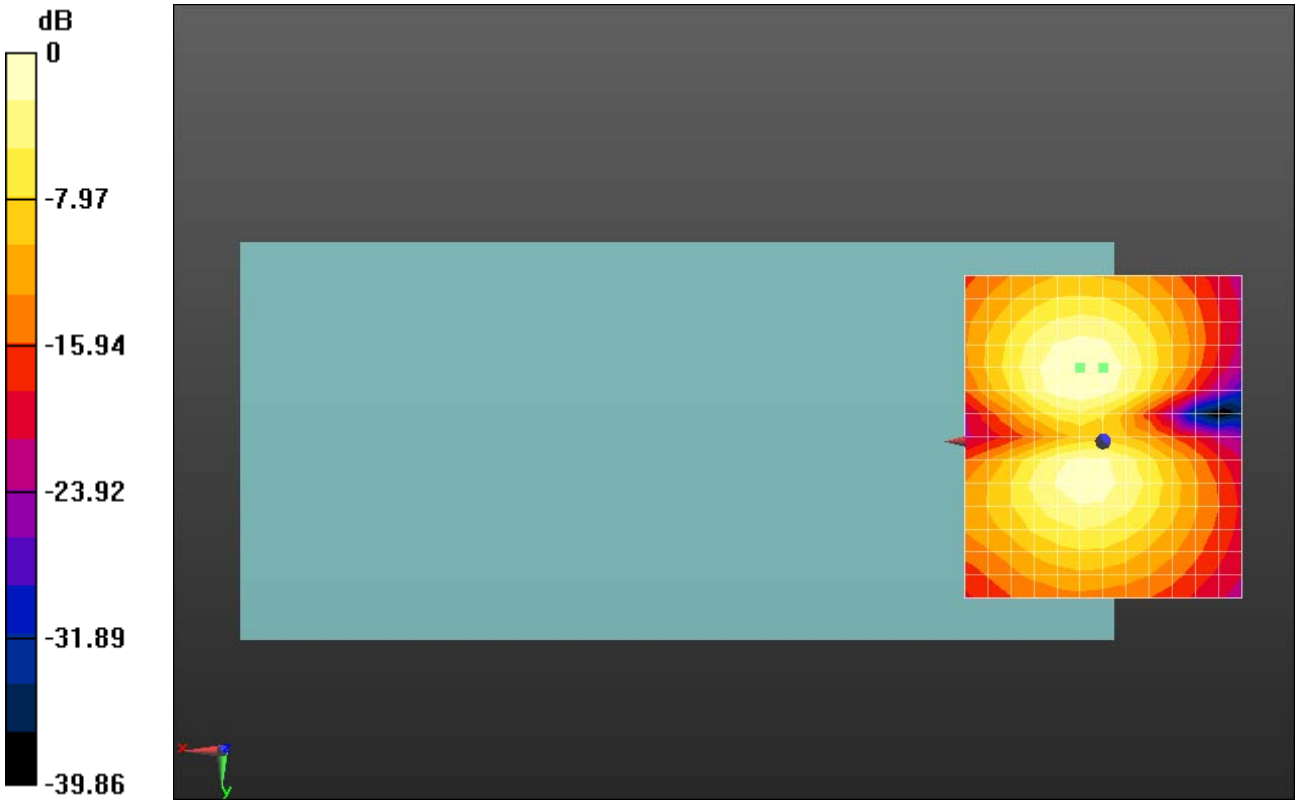
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 25_20M_QPSK_1RB_49offset_12.2Kbps_Ch26365_Y

Communication System: UID 10169 - CAB, LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK);
Frequency: 1882.5 MHz;Duty Cycle: 1:3.74111
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch26365/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 30.17 dB
ABM1 comp = -14.31 dBA/m
BWC Factor = 0.17 dB
Location: 0, -13.3, 3.7 mm



0 dB = 32.24 = 30.17 dB

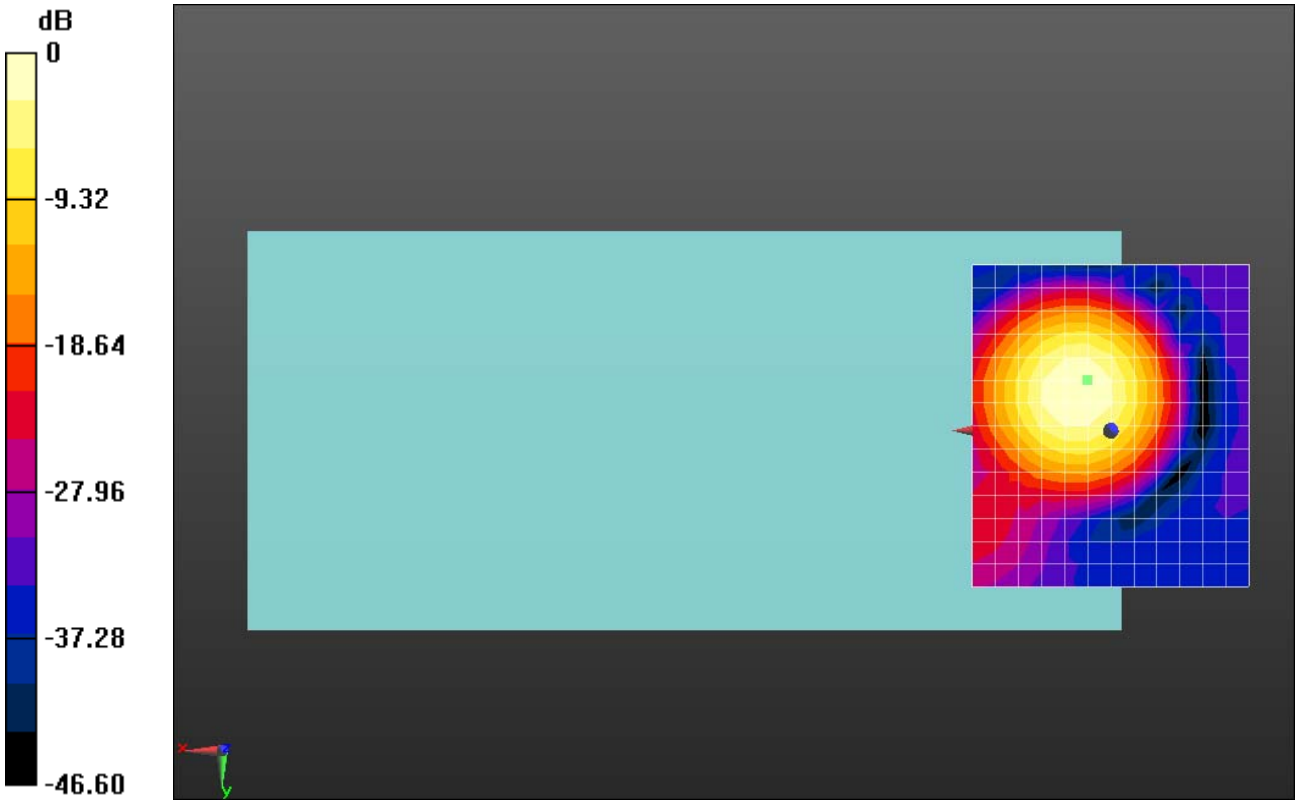
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 26_15M_QPSK_1RB_37offset_12.2Kbps_Ch26865_Z

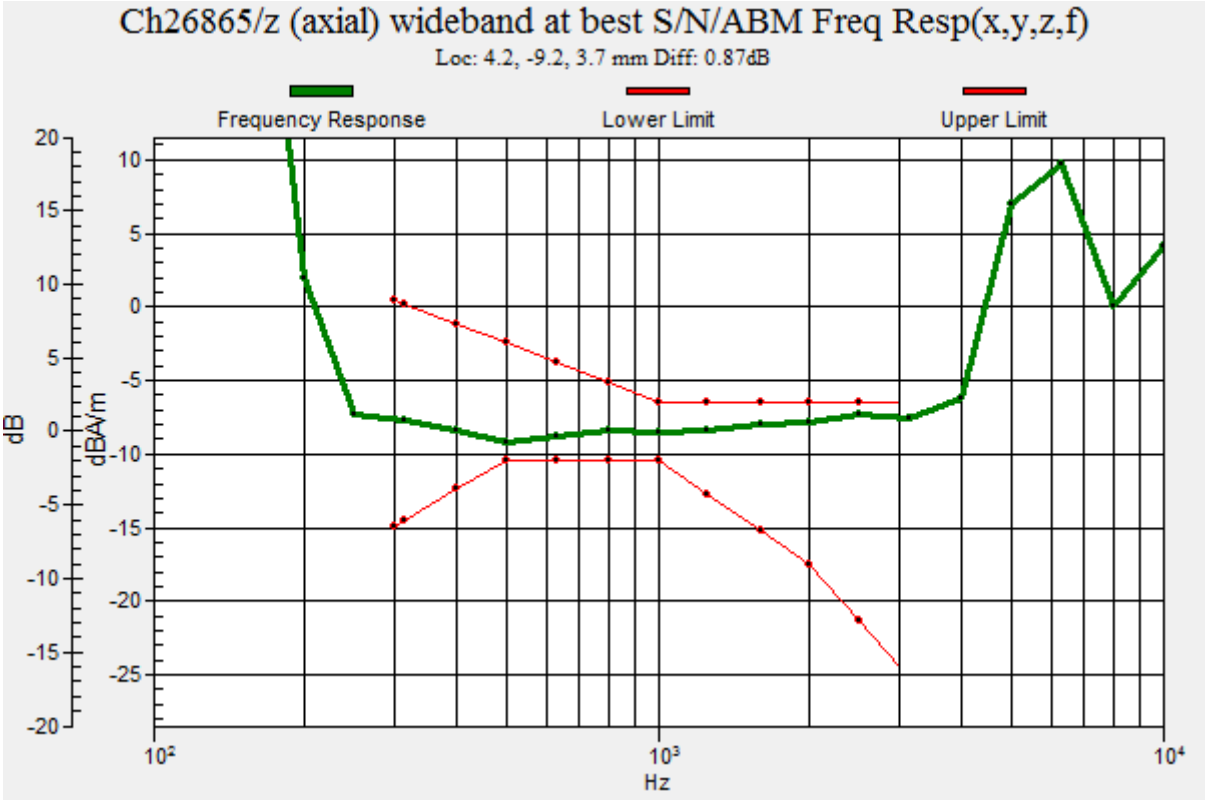
Communication System: UID 10181 - CAB, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK);
Frequency: 831.5 MHz;Duty Cycle: 1:3.7325
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch26865/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid:
dx=10mm, dy=10mm
ABM1/ABM2 = 34.30 dB
ABM1 comp = -6.91 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 51.86 = 34.30 dB


Ch26865/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 0.87dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz

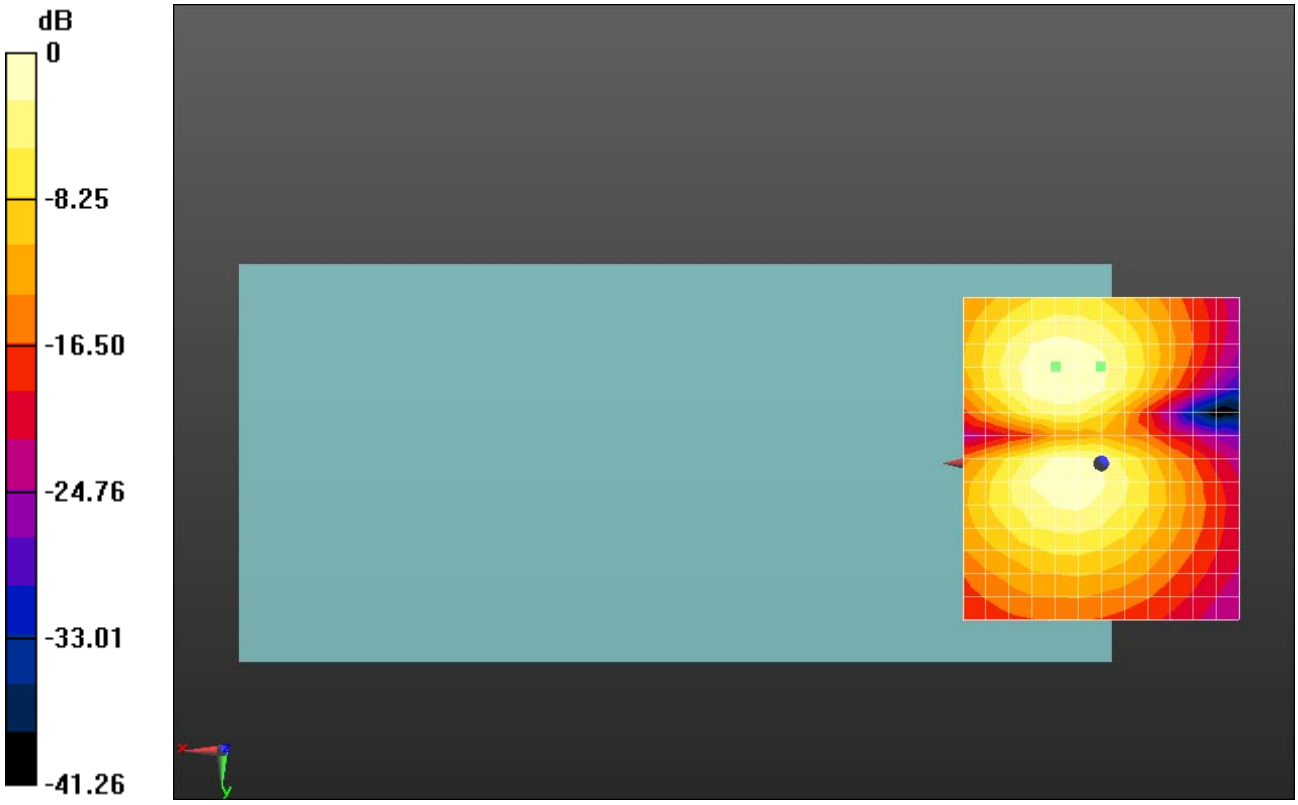
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 26_15M_QPSK_1RB_37offset_12.2Kbps_Ch26865_Y

Communication System: UID 10181 - CAB, LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK);
Frequency: 831.5 MHz;Duty Cycle: 1:3.7325
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch26865/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 30.90 dB
ABM1 comp = -15.59 dBA/m
BWC Factor = 0.17 dB
Location: 0, -17.5, 3.7 mm



0 dB = 35.06 = 30.90 dB

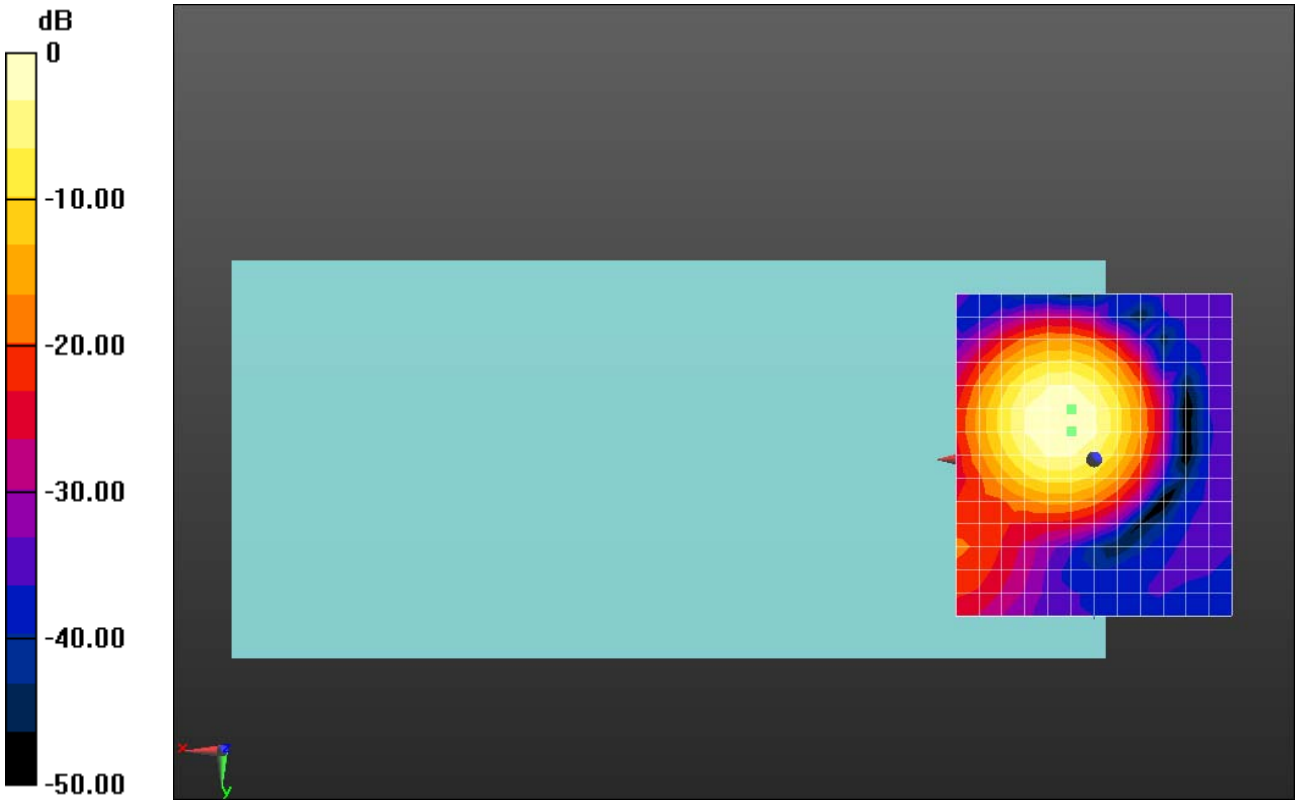
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 41_20M_QPSK_1RB_49offset_12.2Kbps_Ch40640_PC2_Z

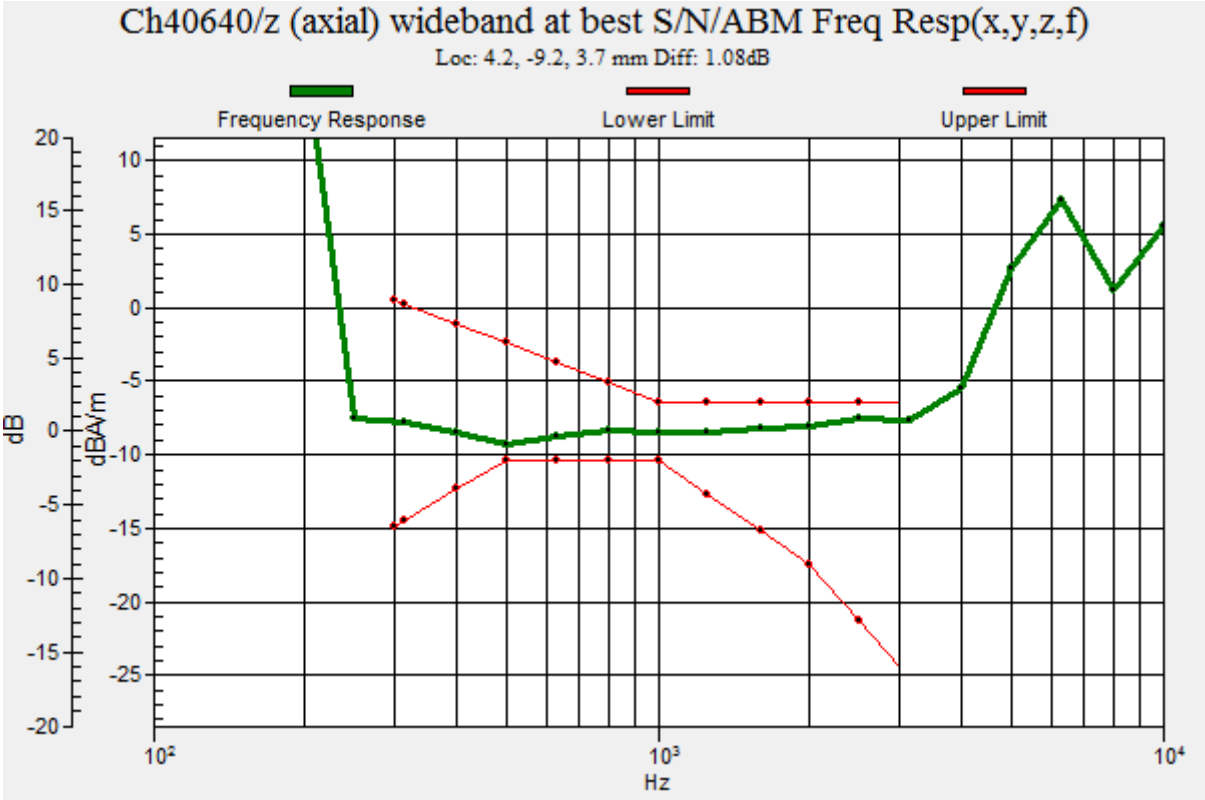
Communication System: UID 0, LTE-FDD (SC-FDMA, 1RB, 20MHz, QPSK) (0); Frequency: 1745 MHz;Duty Cycle: 1:3.74111
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch40640/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 30.77 dB
ABM1 comp = -7.39 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 34.57 = 30.77 dB


Ch40640/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 1.08dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
10²
10³
10⁴

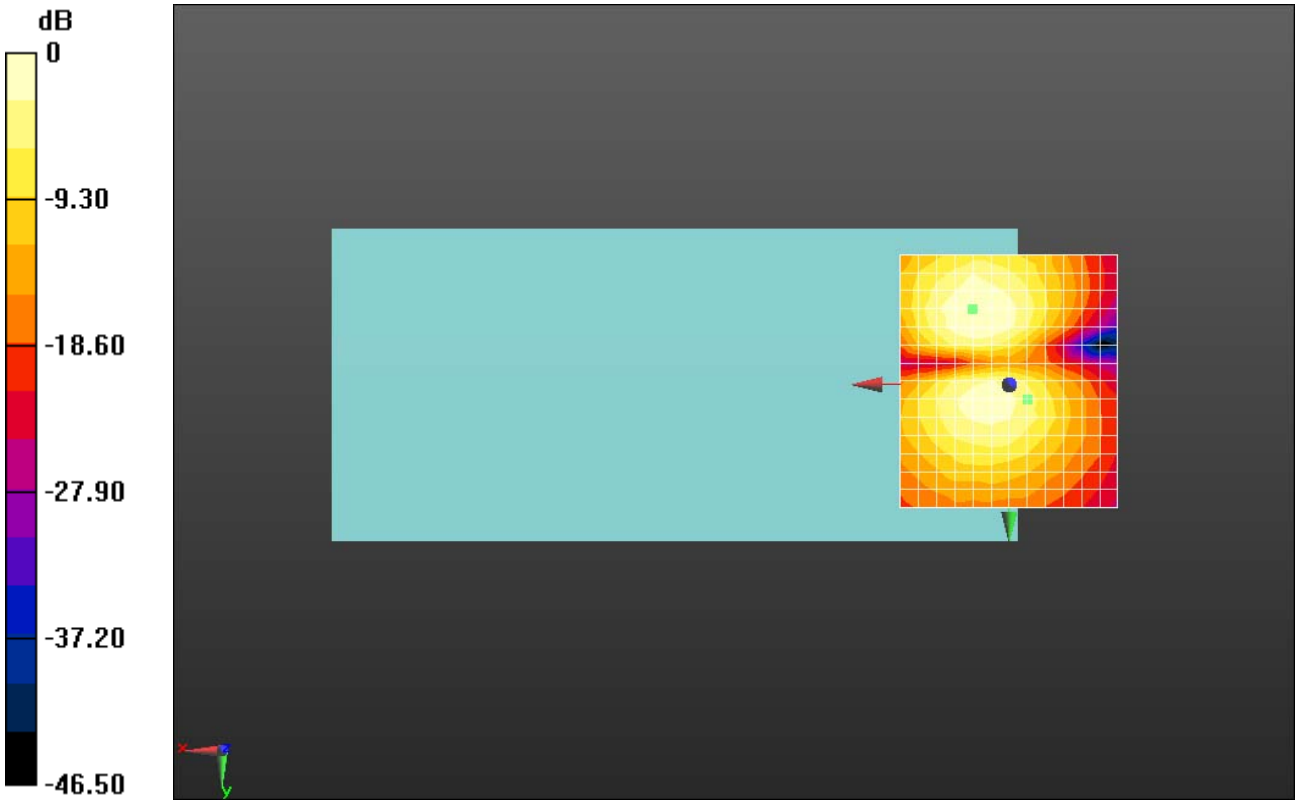
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.03

HAC_T-Coil_LTE Band 41_20M_QPSK_1RB_49offset_12.2Kbps_Ch40640_PC2_Y

Communication System: UID 10172 - CAB, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2595 MHz;Duty Cycle: 1:8.33681
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch40640/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 25.10 dB
ABM1 comp = -17.60 dBA/m
BWC Factor = 0.18 dB
Location: -4.2, 3.3, 3.7 mm



0 dB = 17.99 = 25.10 dB

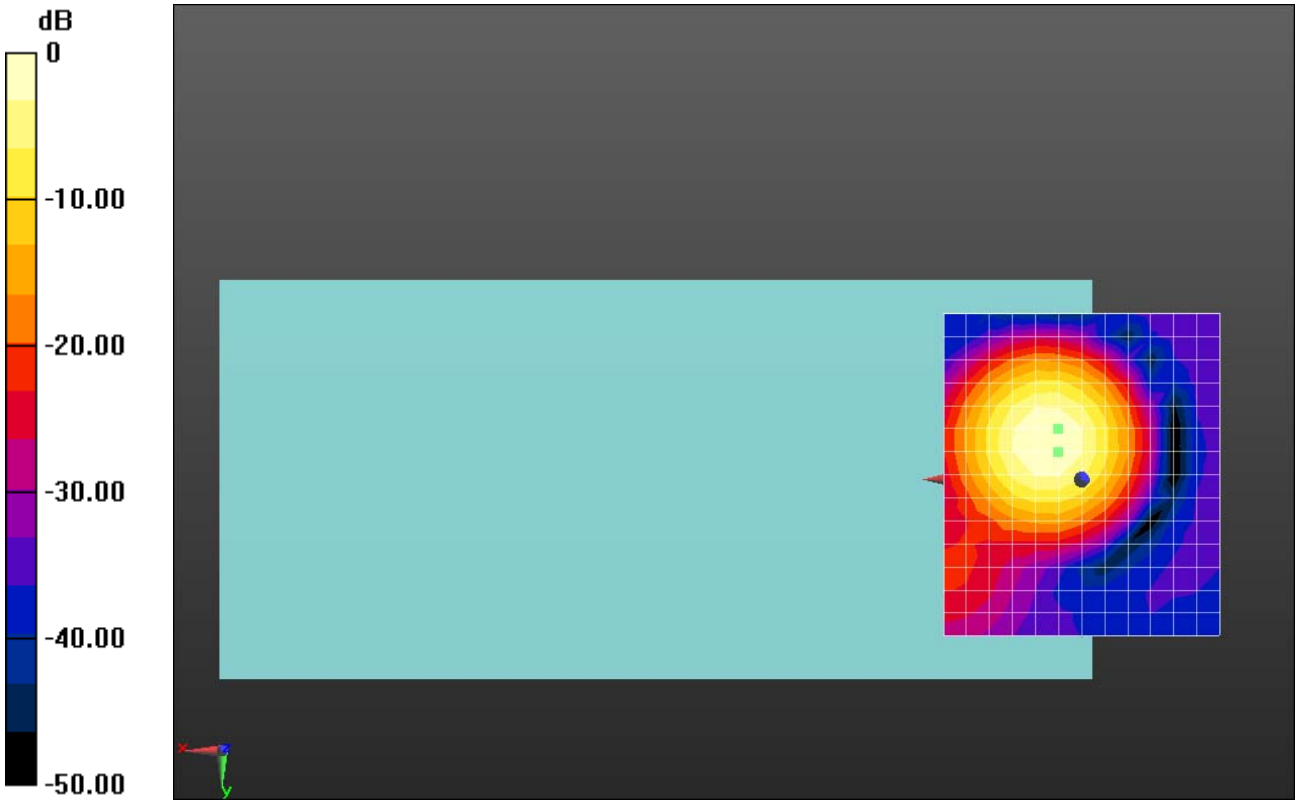
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 41_20M_QPSK_1RB_49offset_12.2Kbps_Ch40640_PC3_Z

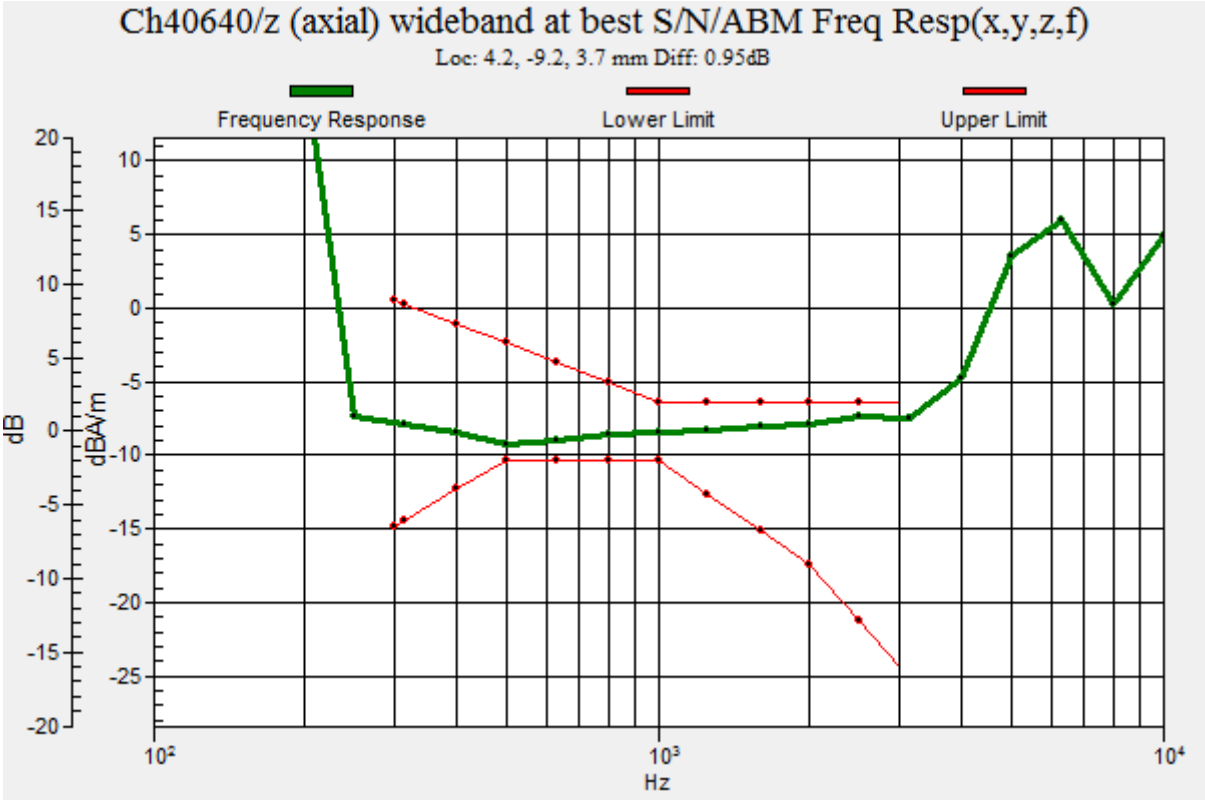
Communication System: UID 10172 - CAB, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2595 MHz;Duty Cycle: 1:8.33681
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch40640/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 31.21 dB
ABM1 comp = -6.93 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 36.34 = 31.21 dB


Ch40640/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 0.95dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
10²
10³
10⁴

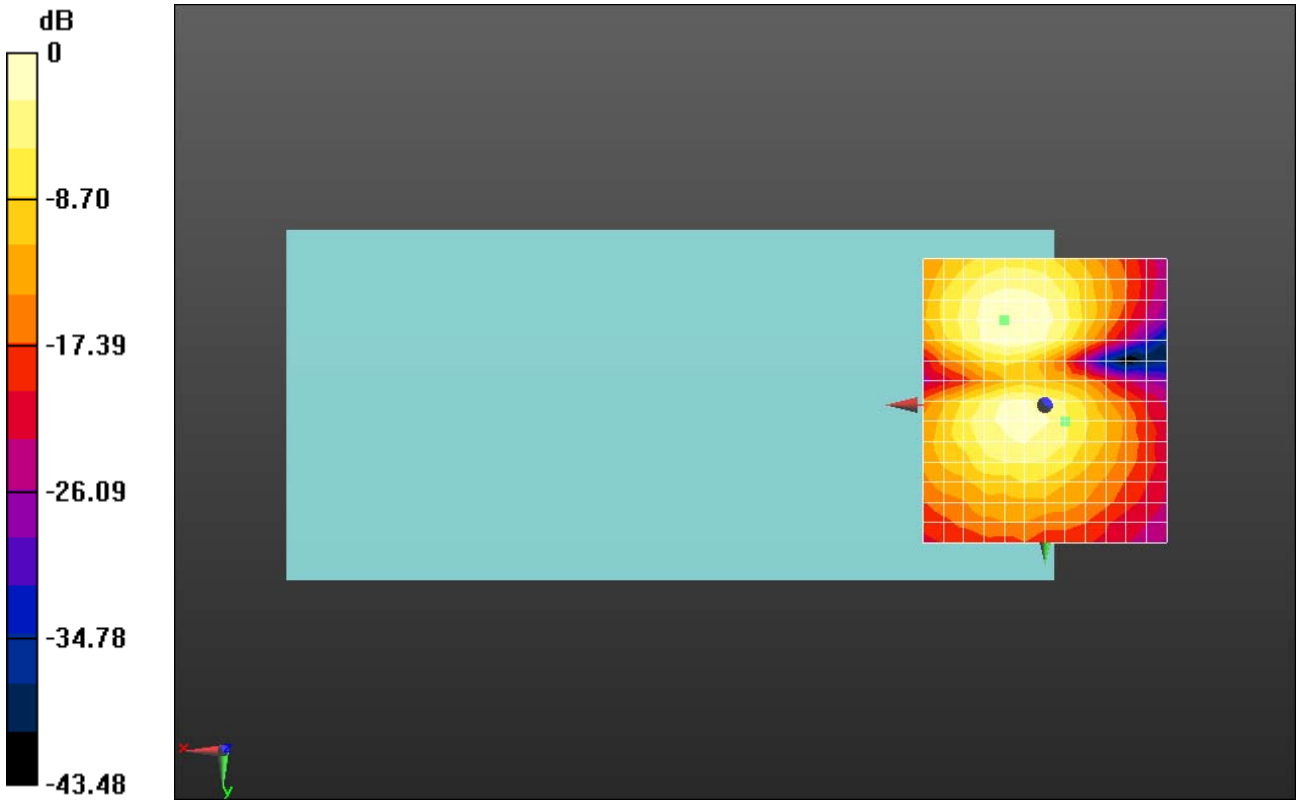
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.03

HAC_T-Coil_LTE Band 41_20M_QPSK_1RB_49offset_12.2Kbps_Ch40640_PC3_Y

Communication System: UID 10172 - CAB, LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK); Frequency: 2595 MHz;Duty Cycle: 1:8.33681
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch40640/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 25.25 dB
ABM1 comp = -17.16 dBA/m
BWC Factor = 0.18 dB
Location: -4.2, 3.3, 3.7 mm



0 dB = 18.30 = 25.25 dB

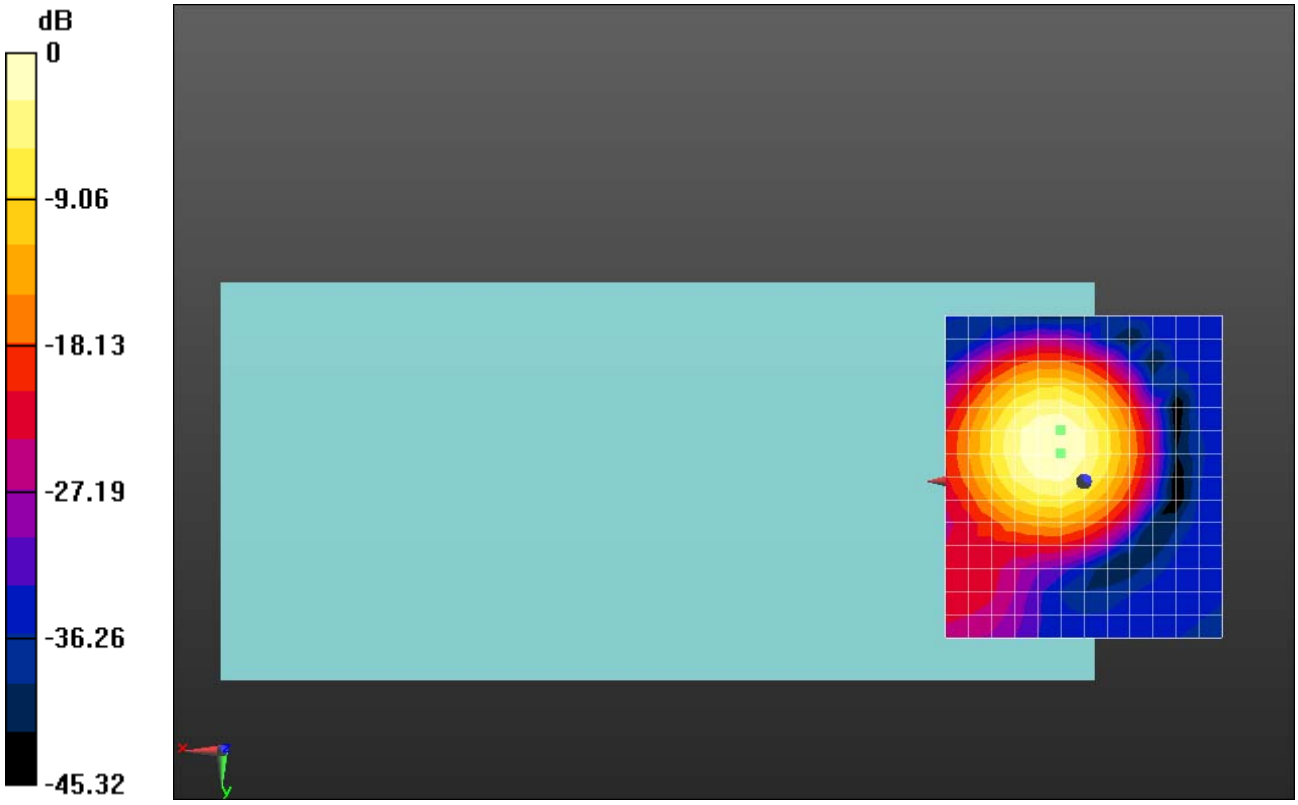
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 66_20M_QPSK_1RB_49offset_12.2Kbps_Ch132322_Z

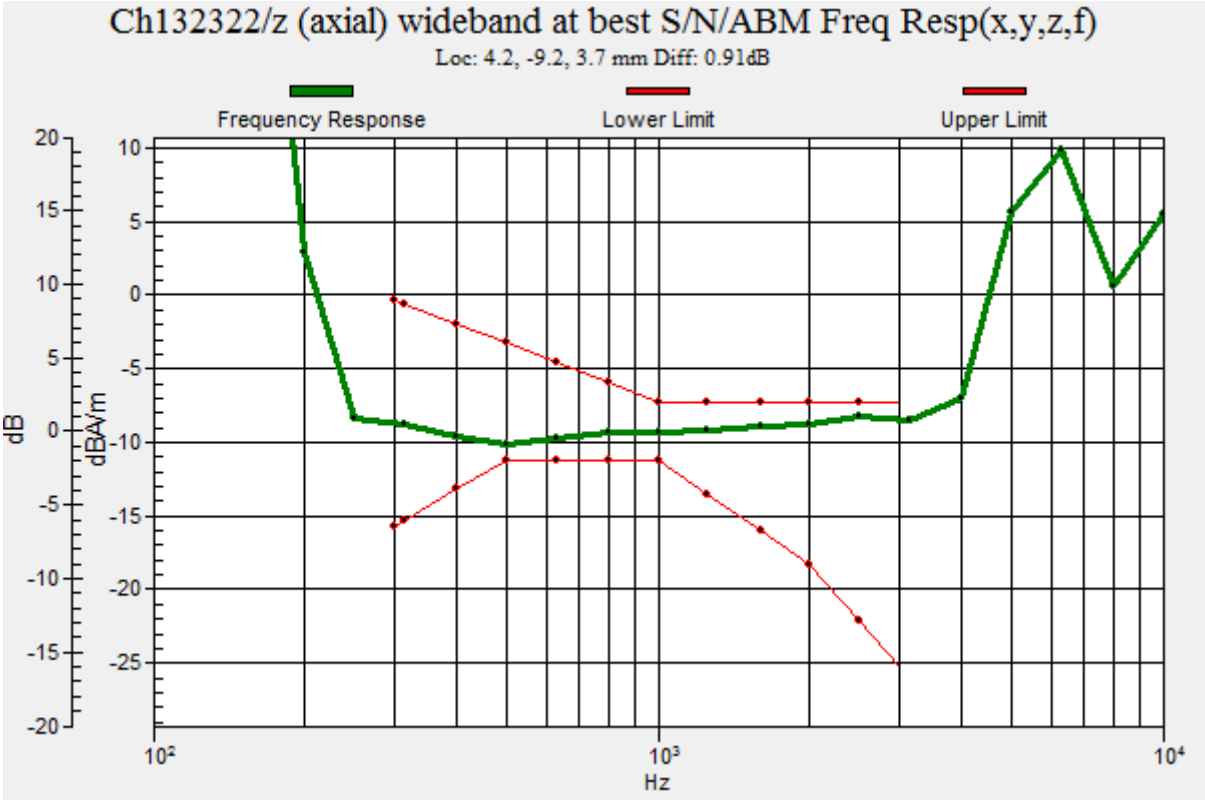
Communication System: UID 0, LTE-FDD (SC-FDMA, 1RB, 20MHz, QPSK) (0); Frequency: 1745 MHz;Duty Cycle: 1:3.74111
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132322/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 34.11 dB
ABM1 comp = -7.81 dBA/m
BWC Factor = 0.17 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 50.76 = 34.11 dB


Ch132322/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 0.91dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz

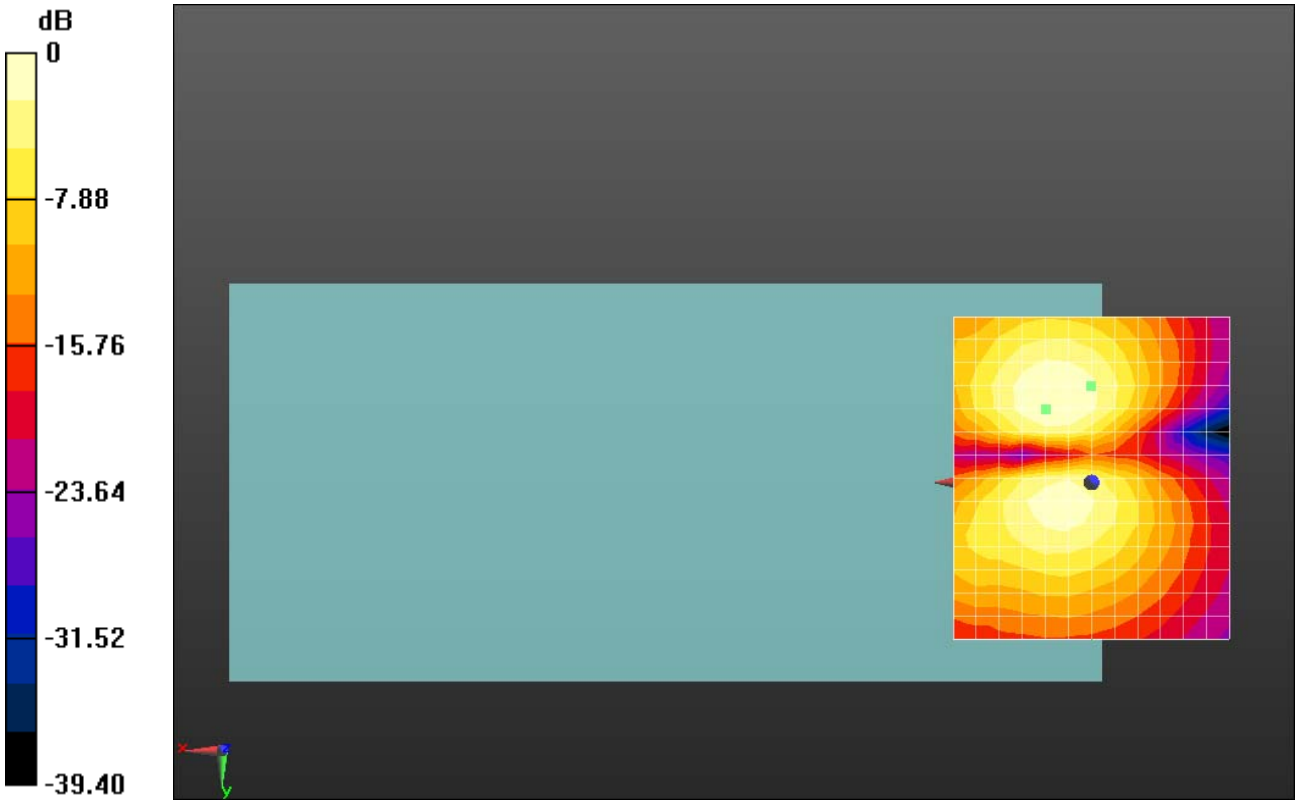
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.06.29

HAC_T-Coil_LTE Band 66_20M_QPSK_1RB_49offset_12.2Kbps_Ch132322_Y

Communication System: UID 0, LTE-FDD (SC-FDMA, 1RB, 20MHz, QPSK) (0); Frequency: 1745 MHz;Duty Cycle: 1:3.74111
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch132322/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 27.62 dB
ABM1 comp = -16.20 dBA/m
BWC Factor = 0.17 dB
Location: 0, -17.5, 3.7 mm



0 dB = 24.05 = 27.62 dB

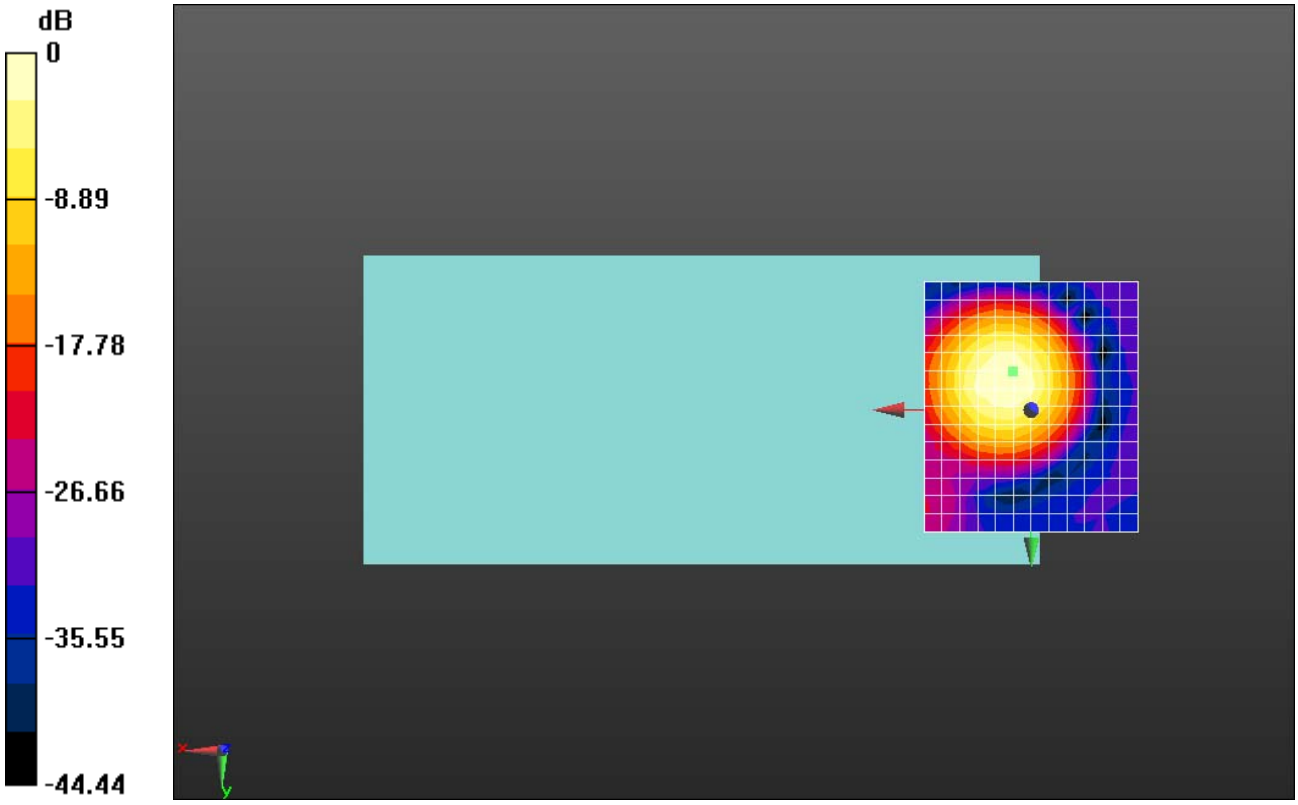
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 2.4GHz_802.11b 1Mbps_AMR 23.85Kbps_Ch7_Z

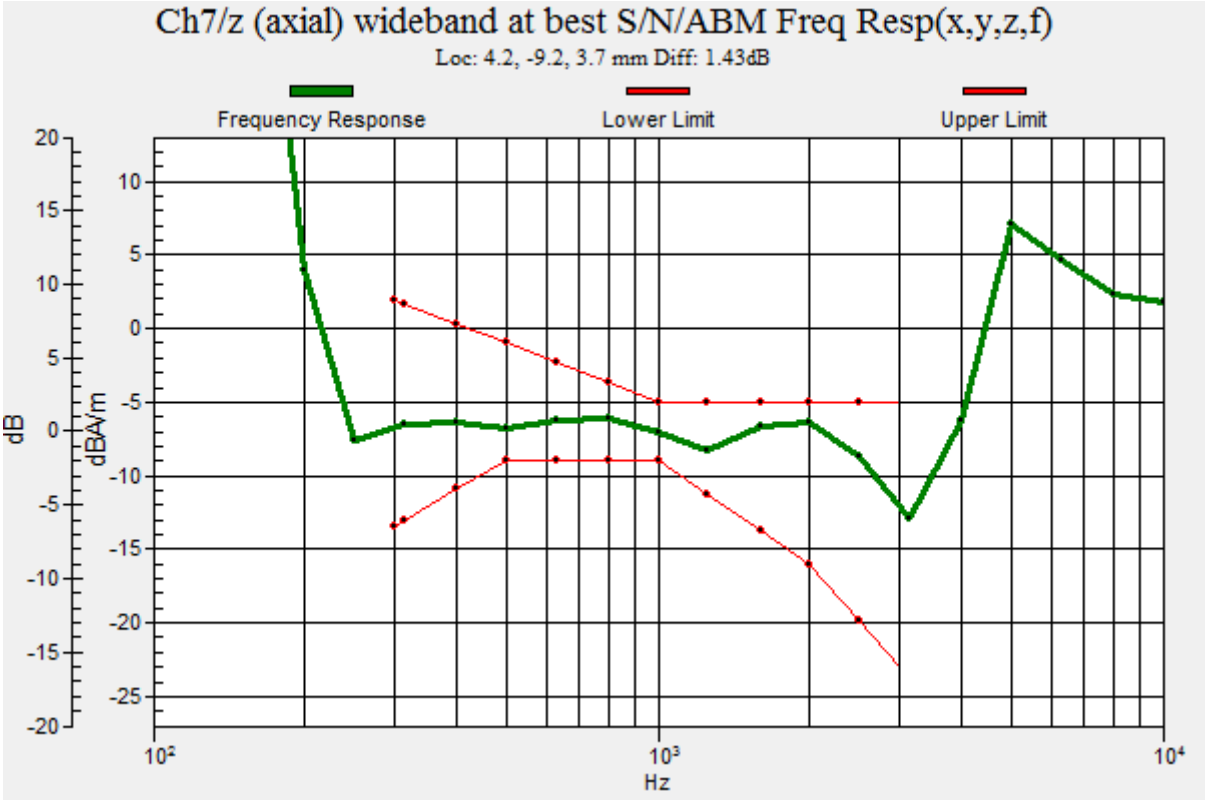
Communication System: UID 10415 - AAA, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle); Frequency: 2442 MHz;Duty Cycle: 1:1.42561
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch7/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 34.18 dB
ABM1 comp = -6.05 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 51.19 = 34.18 dB


Ch7/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 1.43dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
10²
10³
10⁴

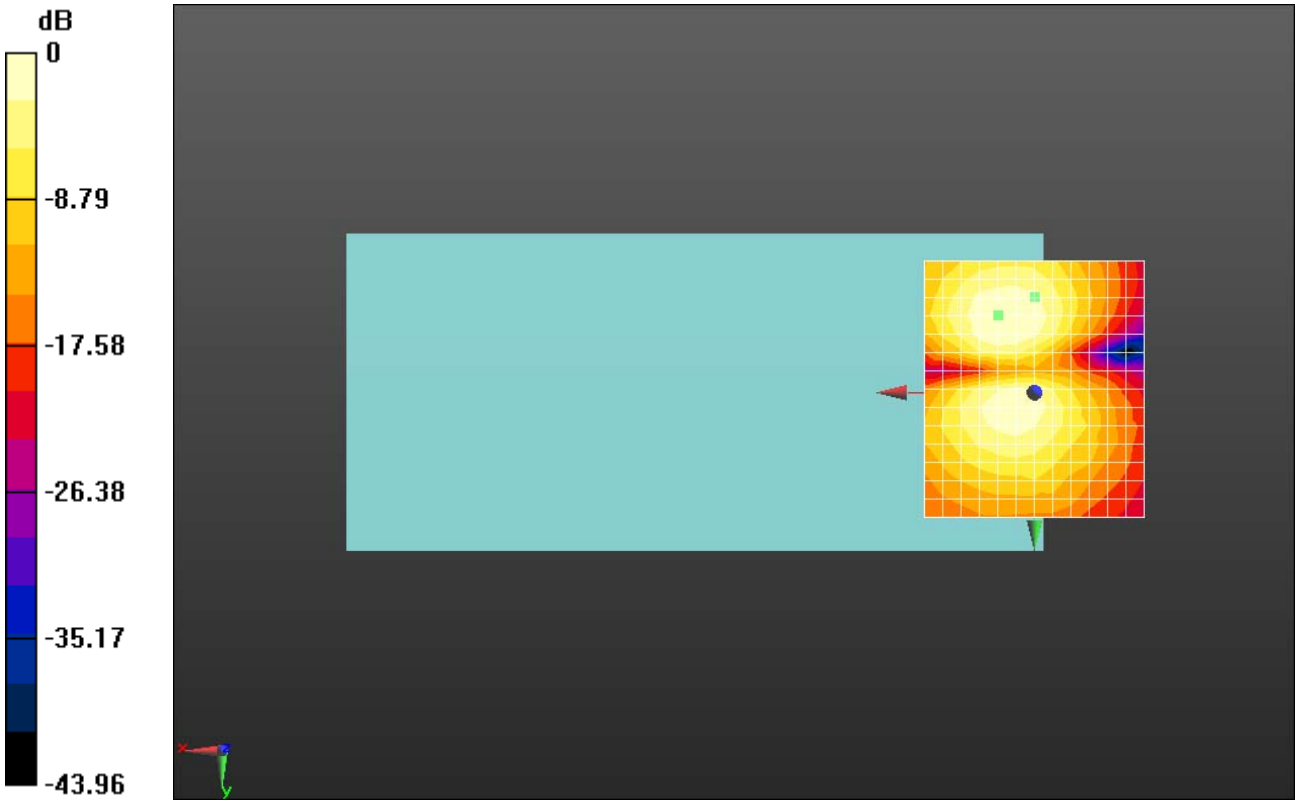
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 2.4GHz_802.11b 1Mbps_AMR 23.85Kbps_Ch7_Y

Communication System: UID 10415 - AAA, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle); Frequency: 2442 MHz;Duty Cycle: 1:1.42561
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch7/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 33.97 dB
ABM1 comp = -15.13 dBA/m
BWC Factor = 0.18 dB
Location: 0, -21.7, 3.7 mm



0 dB = 49.92 = 33.97 dB

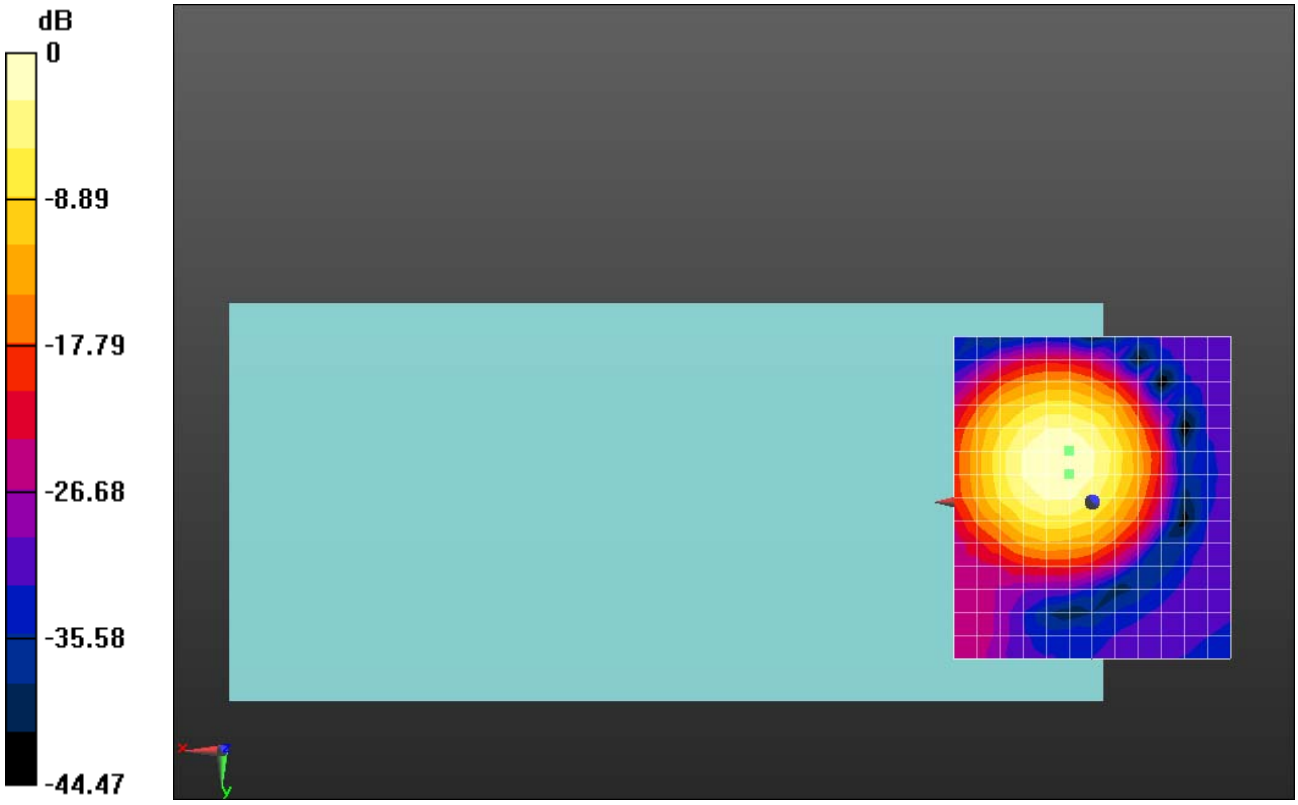
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 2.4GHz_802.11g 6Mbps_AMR 23.85Kbps_Ch7_Z

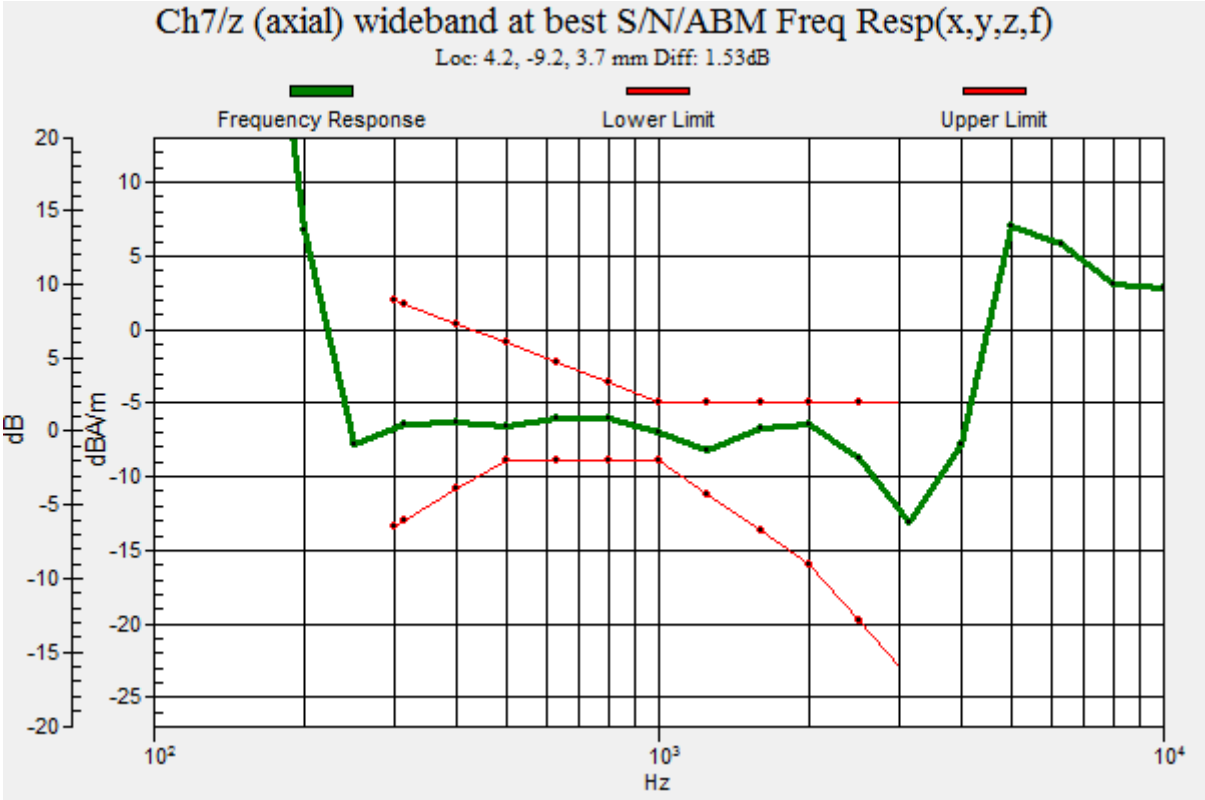
Communication System: UID 10418 - AAA, IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule); Frequency: 2437 MHz;Duty Cycle: 1:6.51628
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃; Liquid Temperature：22.1 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch7/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 34.16 dB
ABM1 comp = -6.16 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 51.02 = 34.15 dB


Ch7/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 1.53dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
10²
10³
10⁴

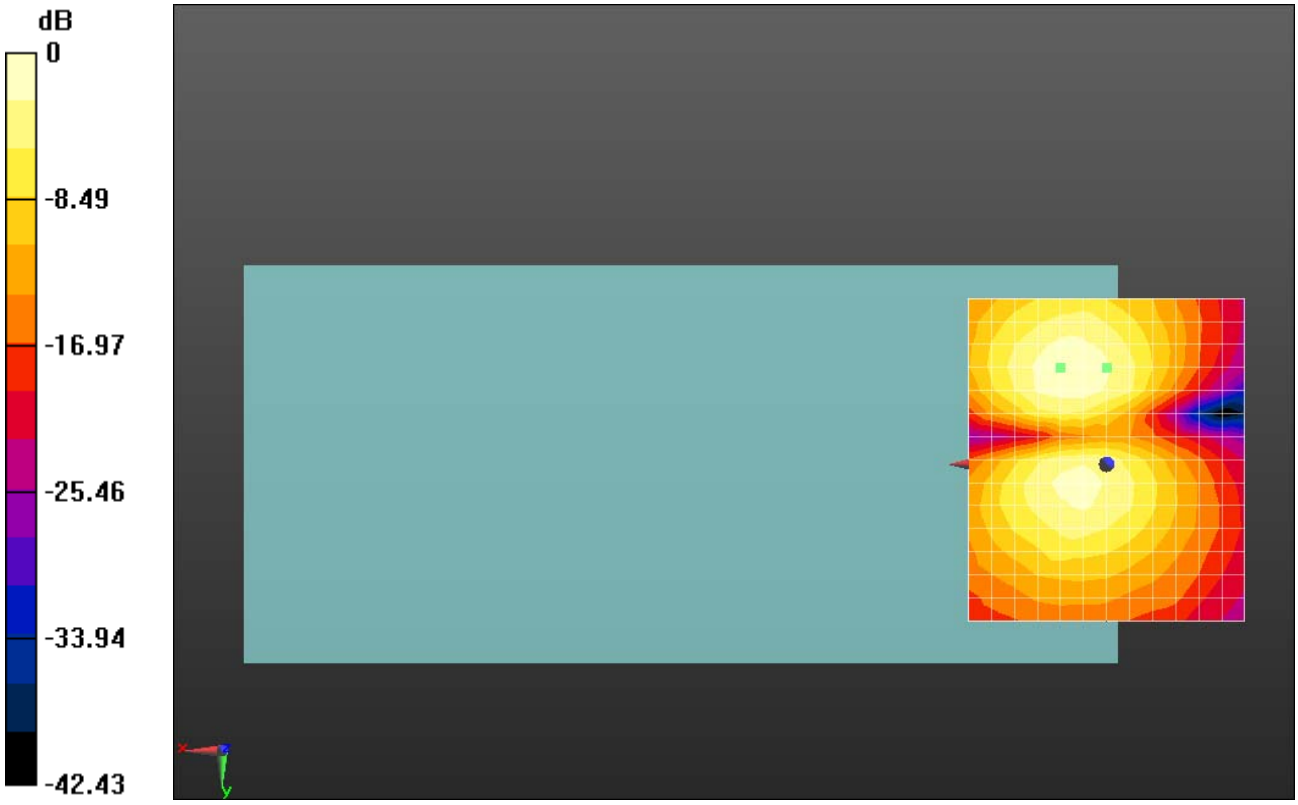
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 2.4GHz_802.11g 6Mbps_AMR 23.85Kbps_Ch7_Y

Communication System: UID 10418 - AAA, IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule); Frequency: 2437 MHz;Duty Cycle: 1:6.51628
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch7/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 32.57 dB
ABM1 comp = -14.96 dBA/m
BWC Factor = 0.18 dB
Location: 0, -17.5, 3.7 mm



0 dB = 42.52 = 32.57 dB

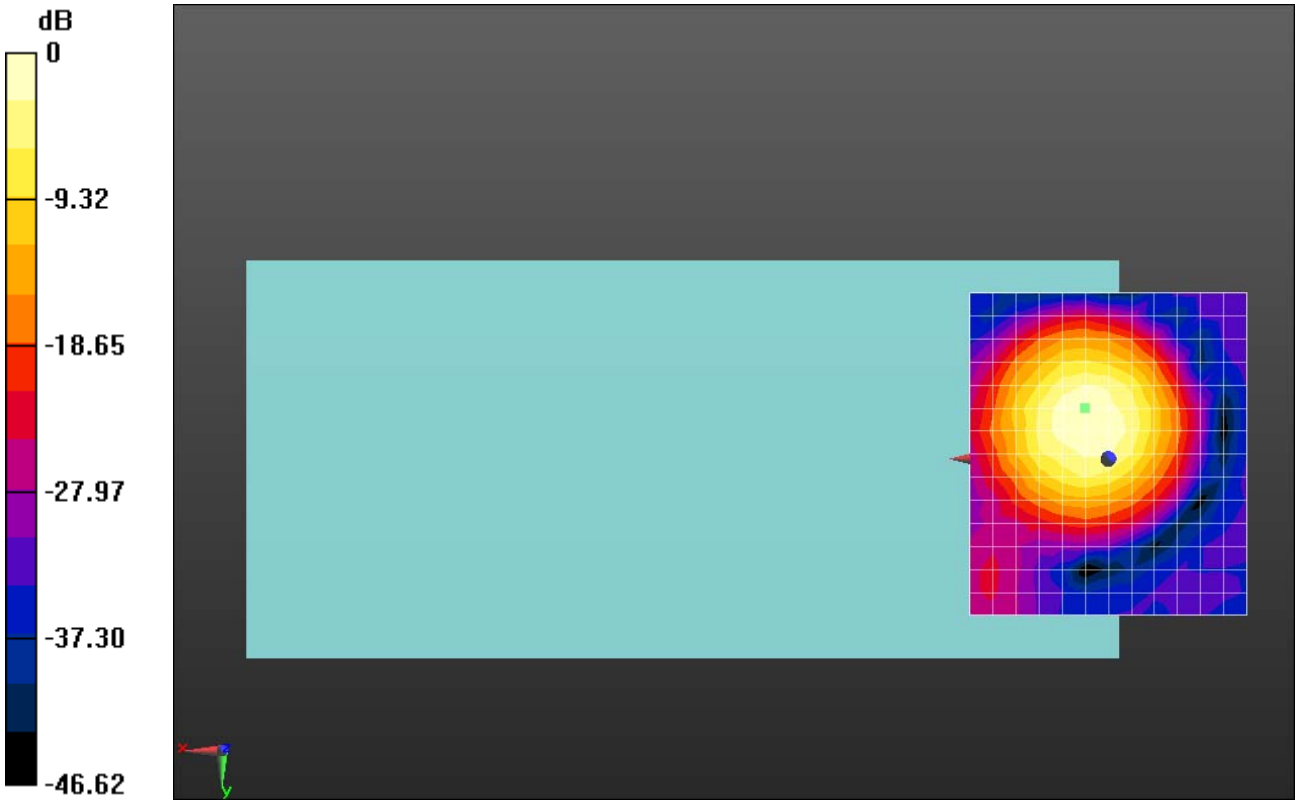
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 2.4GHz_802.11n-HT20 MCS0_AMR 23.85Kbps_Ch7_Z

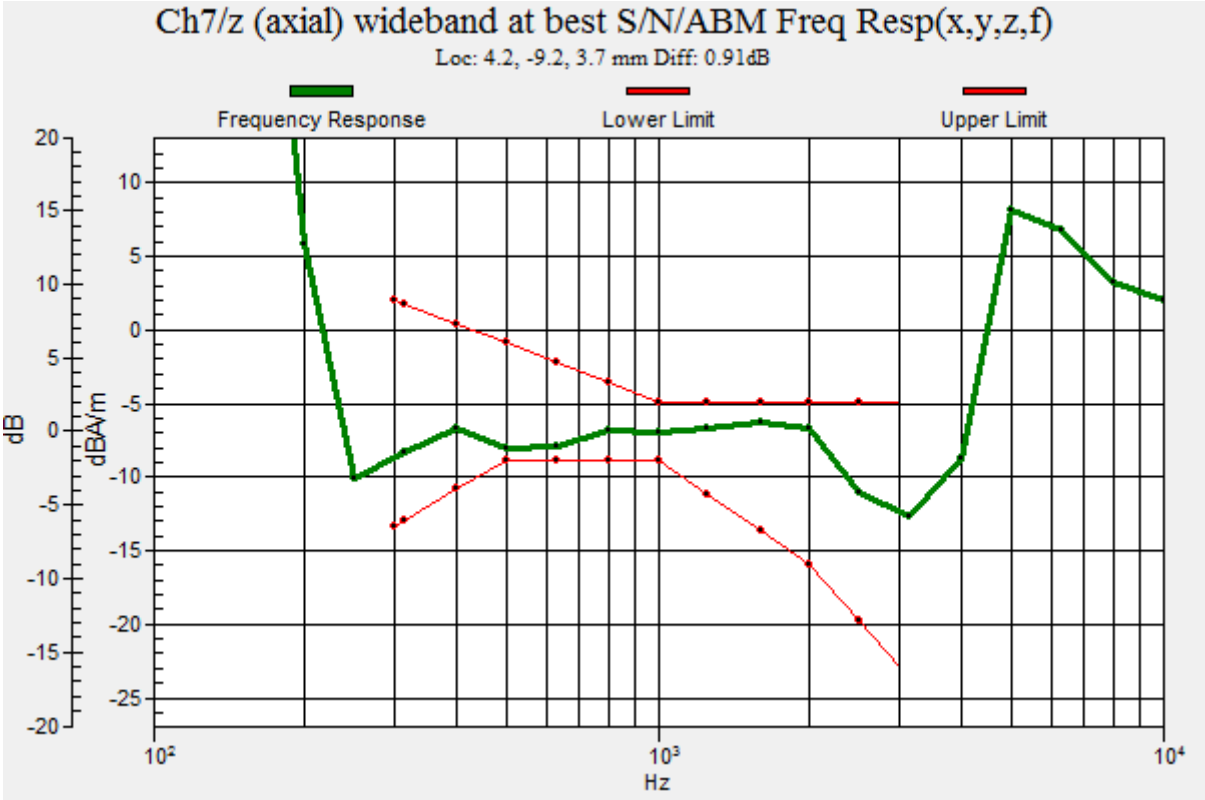
Communication System: UID 10193 - CAA, IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK); Frequency: 2442 MHz;Duty Cycle: 1:6.44169
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch7/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 34.71 dB
ABM1 comp = -4.74 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 54.37 = 34.71 dB


Ch7/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 0.91dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
10²
10³
10⁴

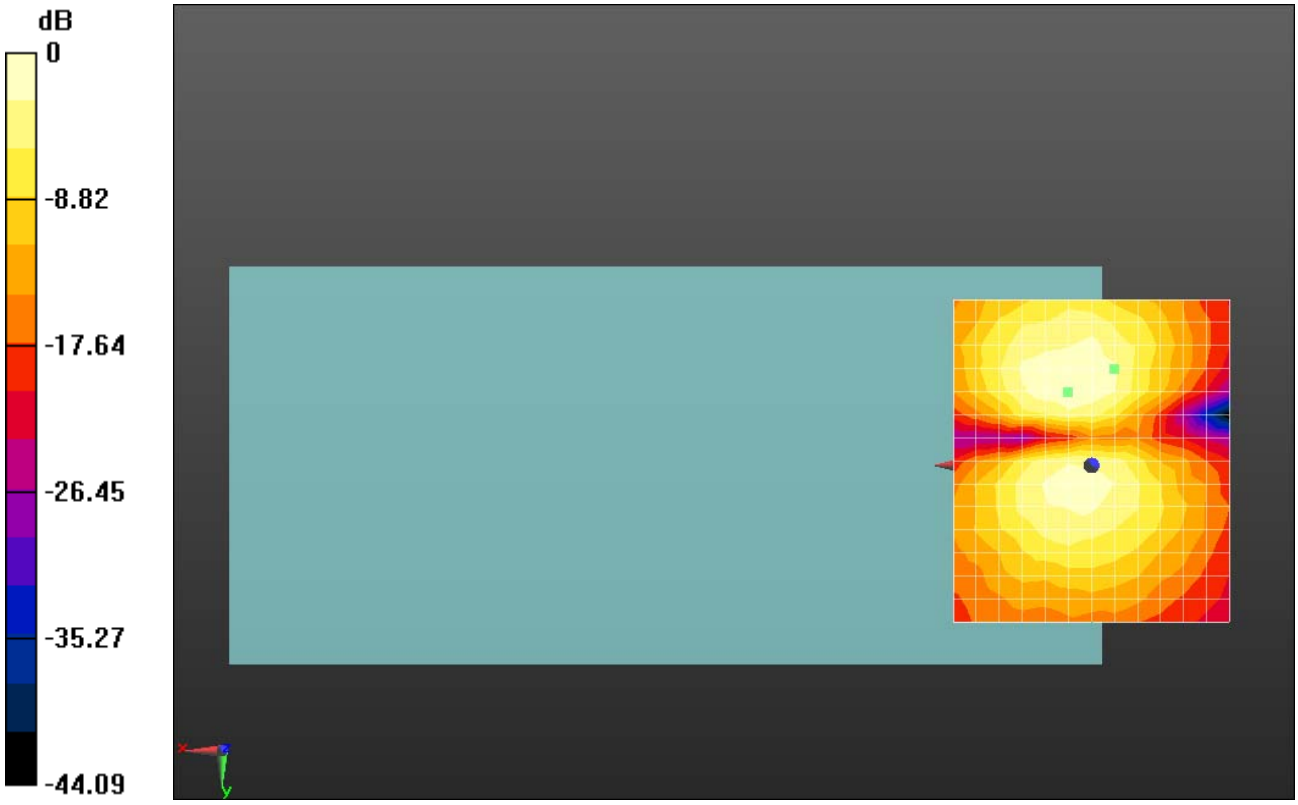
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 2.4GHz_802.11n-HT20 MCS0_AMR 23.85Kbps_Ch7_Y

Communication System: UID 10193 - CAA, IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK);
Frequency: 2442 MHz;Duty Cycle: 1:6.44169
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch7/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 34.72 dB
ABM1 comp = -14.37 dBA/m
BWC Factor = 0.18 dB
Location: -4.2, -17.5, 3.7 mm



0 dB = 54.45 = 34.72 dB

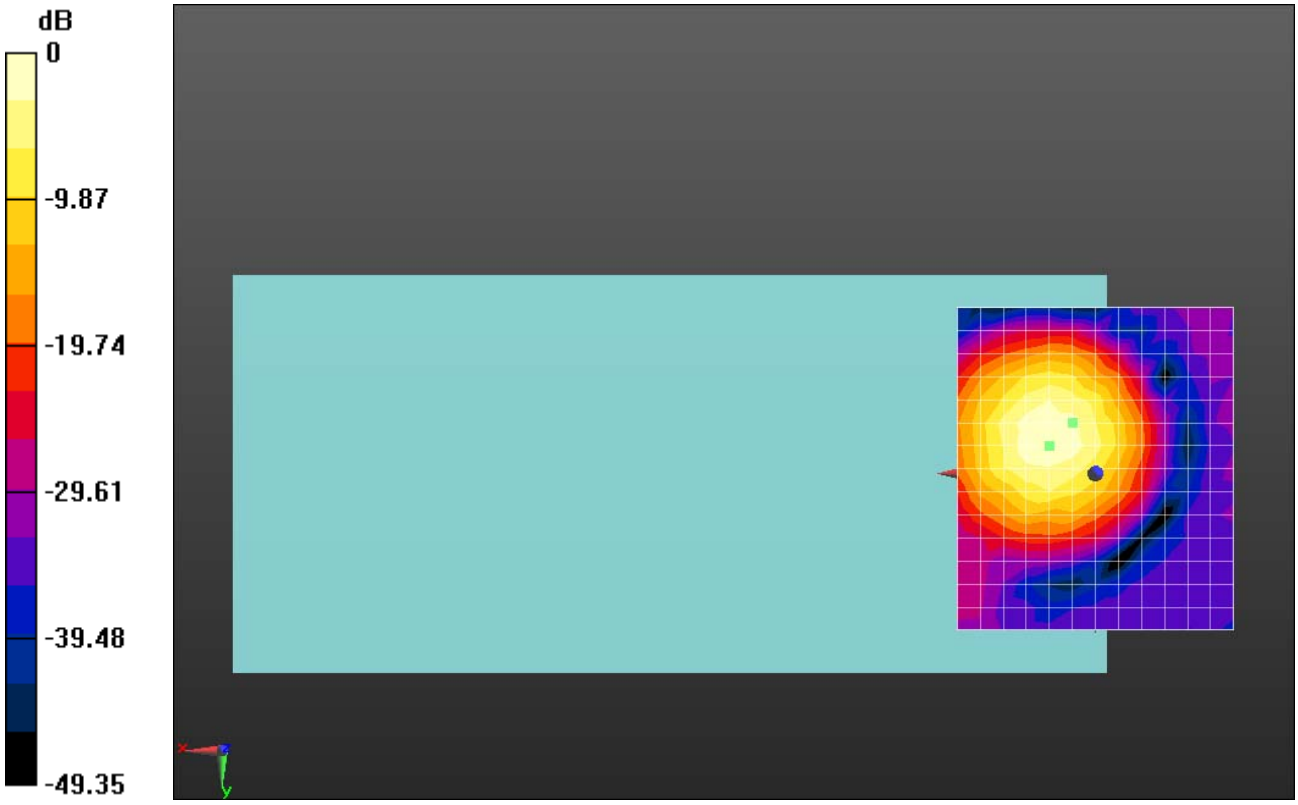
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 2.4GHz_802.11n-HT40 MCS0_AMR 23.85Kbps_Ch7_Z

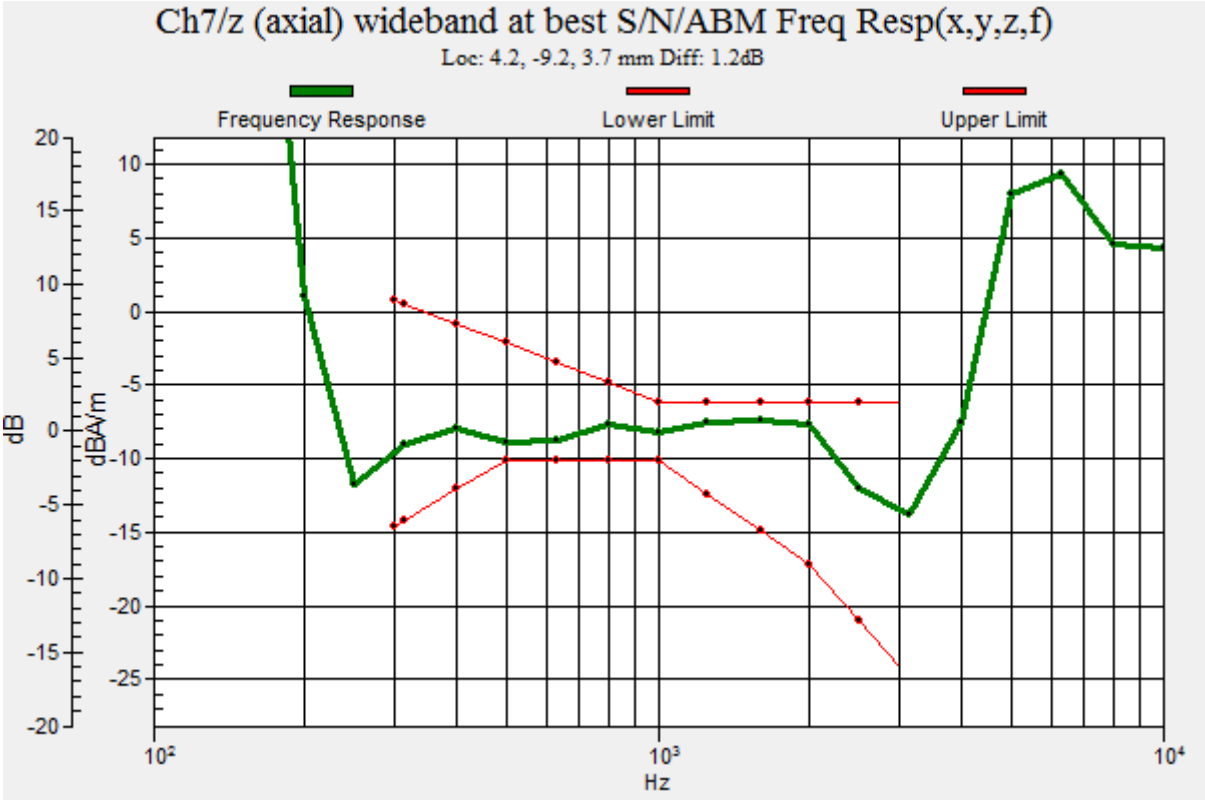
Communication System: UID 10193 - CAA, IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK); Frequency: 2442 MHz;Duty Cycle: 1:6.44169
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch7/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 37.61 dB
ABM1 comp = -6.39 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 75.99 = 37.62 dB


Ch7/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 1.2dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
10²
10³
10⁴

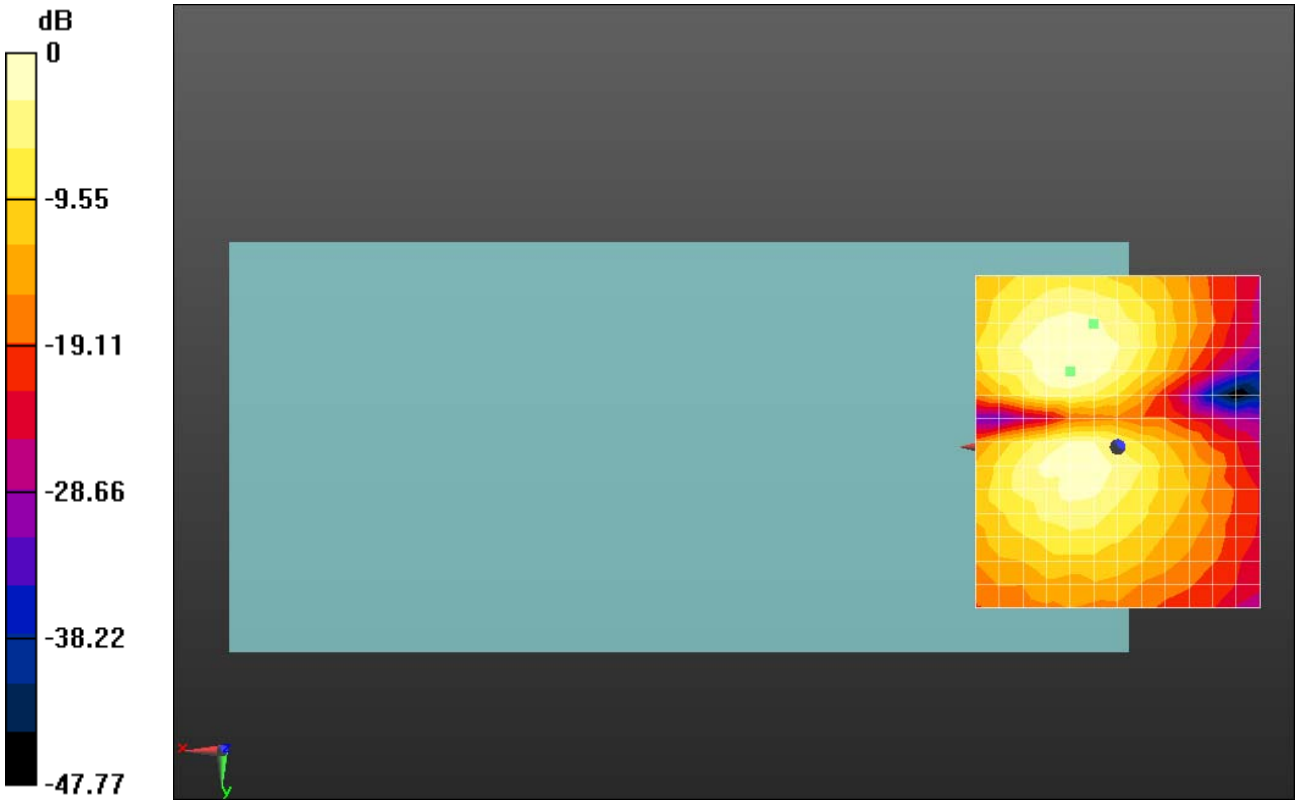
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 2.4GHz_802.11n-HT40 MCS0_AMR 23.85Kbps_Ch7_Y

Communication System: UID 10193 - CAA, IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK);
Frequency: 2442 MHz;Duty Cycle: 1:6.44169
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch7/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 34.75 dB
ABM1 comp = -14.18 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -21.7, 3.7 mm



0 dB = 54.64 = 34.75 dB

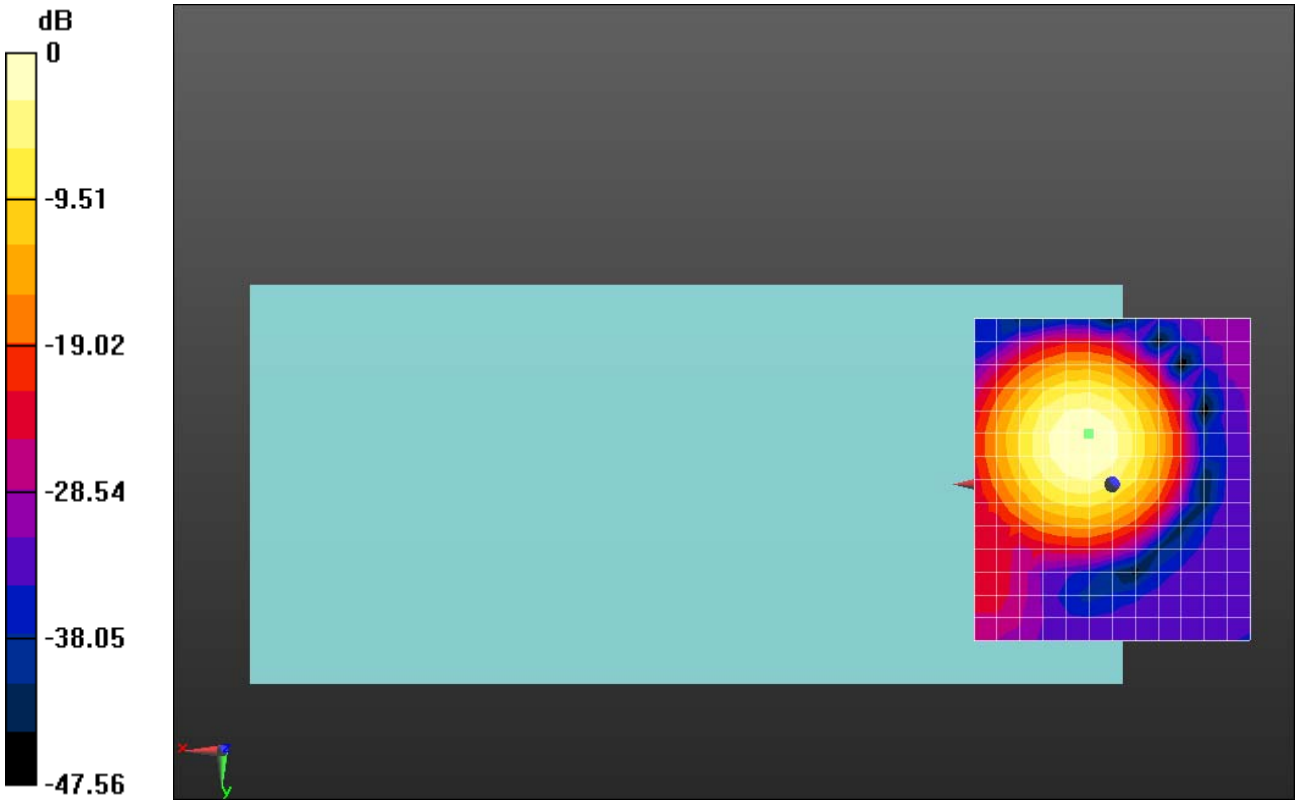
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.03

HAC_T-Coil_VoWiFi 5.2GHz_802.11a 6Mbps_AMR 23.85Kbps_Ch44_Z

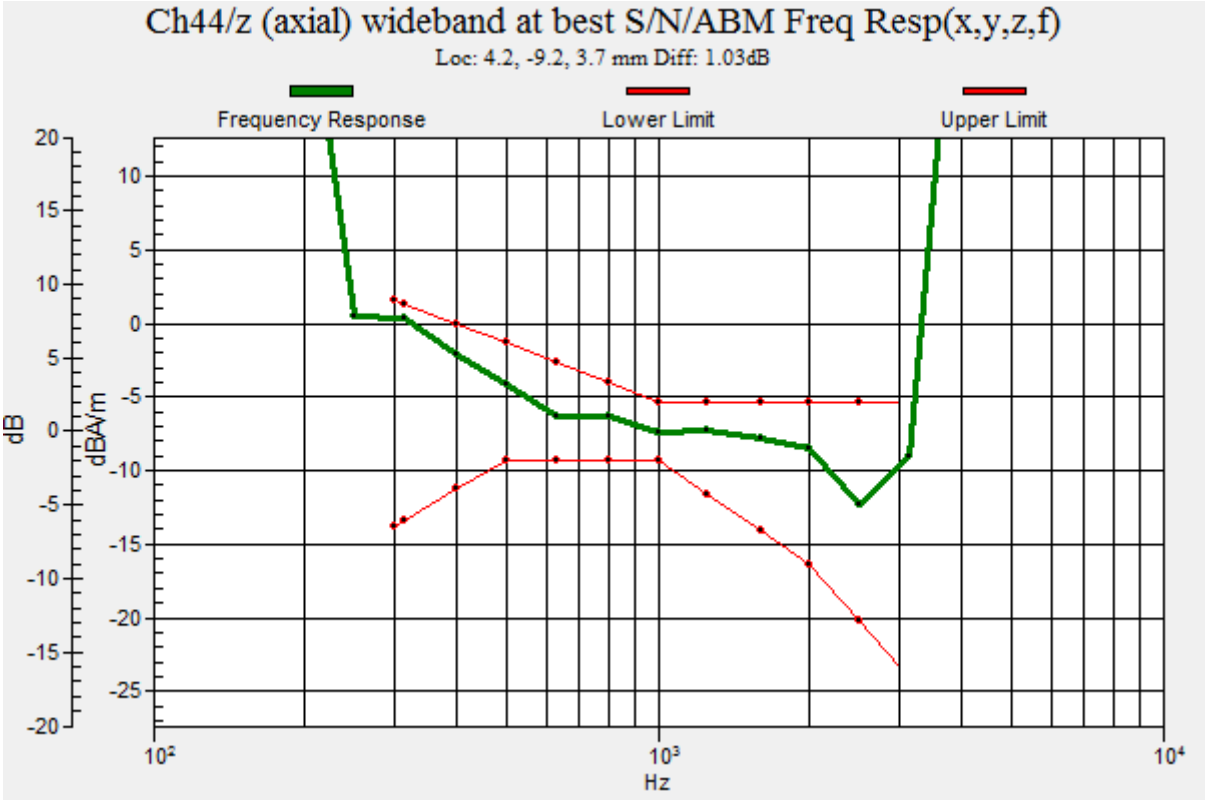
Communication System: UID 10317 - AAA, IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle); Frequency: 5220 MHz;Duty Cycle: 1:6.85488
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch44/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 35.38 dB
ABM1 comp = -5.07 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 58.75 = 35.38 dB


Ch44/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 1.03dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
10²
10³
10⁴

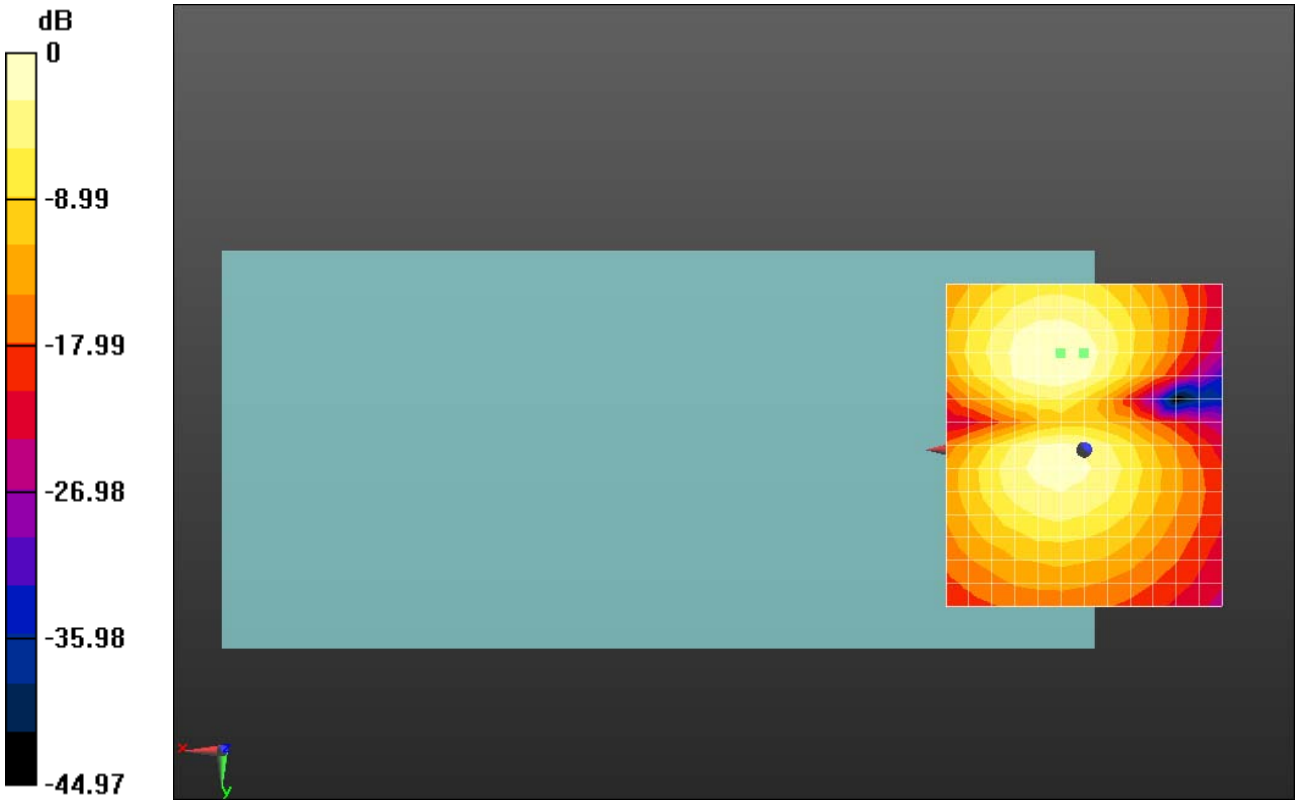
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.03

HAC_T-Coil_VoWiFi 5.2GHz_802.11a 6Mbps_AMR 23.85Kbps_Ch44_Y

Communication System: UID 10317 - AAA, IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle); Frequency: 5220 MHz;Duty Cycle: 1:6.85488
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch44/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 34.84 dB
ABM1 comp = -13.34 dBA/m
BWC Factor = 0.18 dB
Location: 0, -17.5, 3.7 mm



0 dB = 54.57 = 34.74 dB

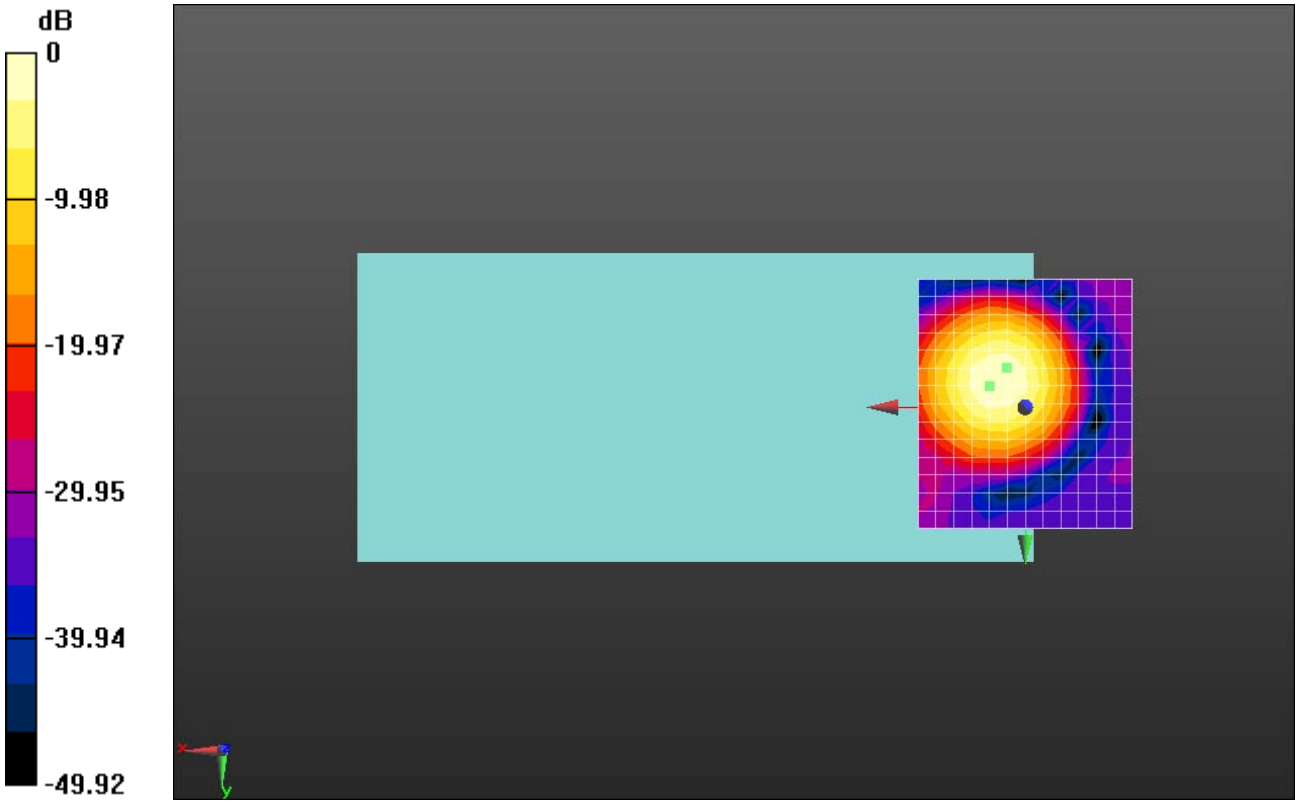
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.3GHz_802.11a 6Mbps_AMR 23.85Kbps_Ch60_Z

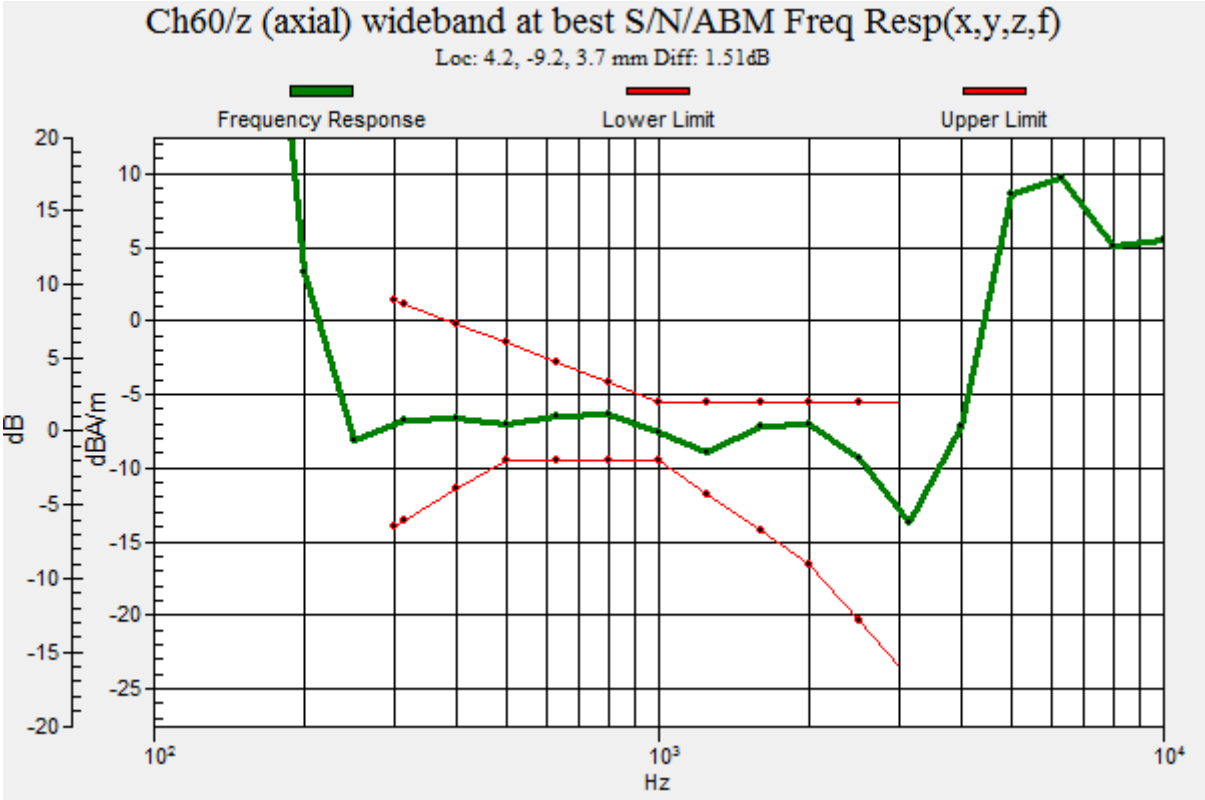
Communication System: UID 10317 - AAA, IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle); Frequency: 5300 MHz;Duty Cycle: 1:6.85488
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch60/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 37.18 dB
ABM1 comp = -6.88 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 72.32 = 37.19 dB


Ch60/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 1.51dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
10²
10³
10⁴

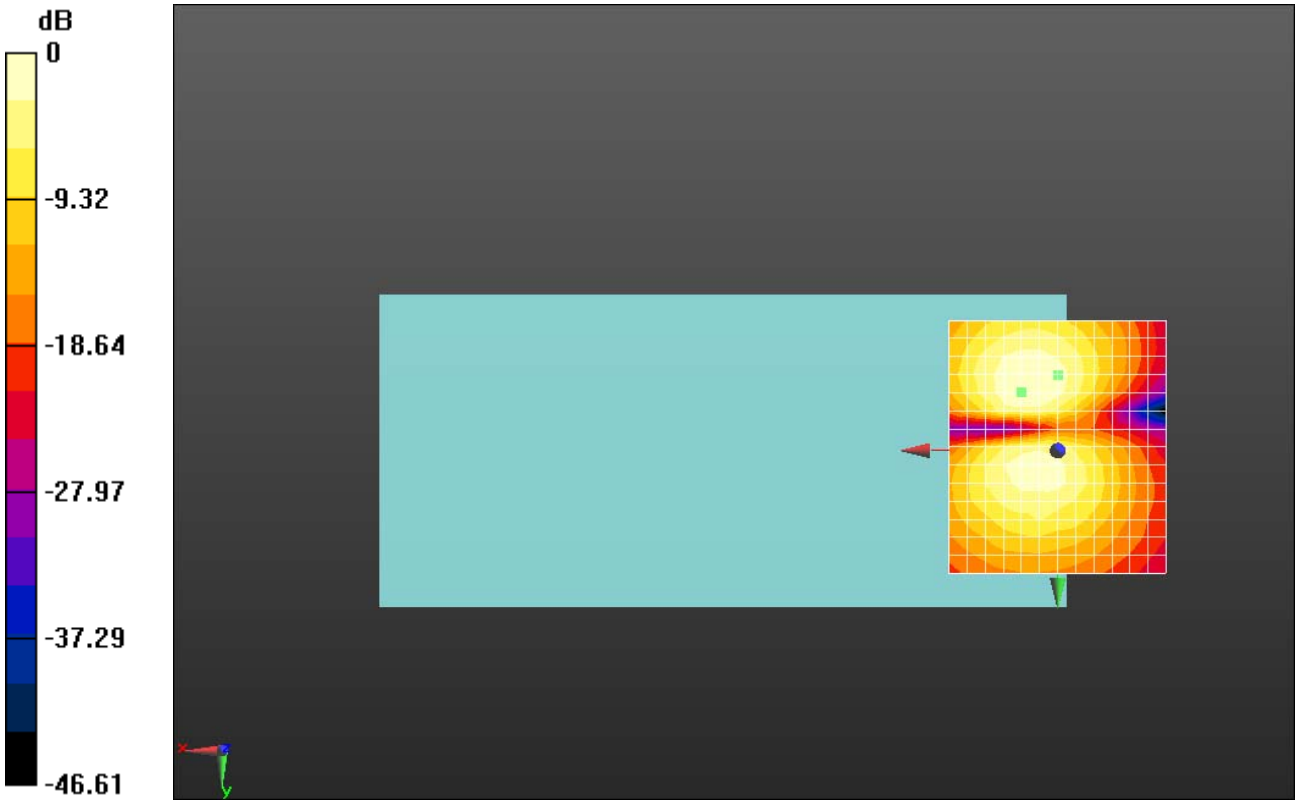
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.3GHz_802.11a 6Mbps_AMR 23.85Kbps_Ch60_Y

Communication System: UID 10317 - AAA, IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle); Frequency: 5300 MHz;Duty Cycle: 1:6.85488
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch60/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 34.82 dB
ABM1 comp = -14.68 dBA/m
BWC Factor = 0.18 dB
Location: 0, -17.5, 3.7 mm



0 dB = 55.08 = 34.82 dB

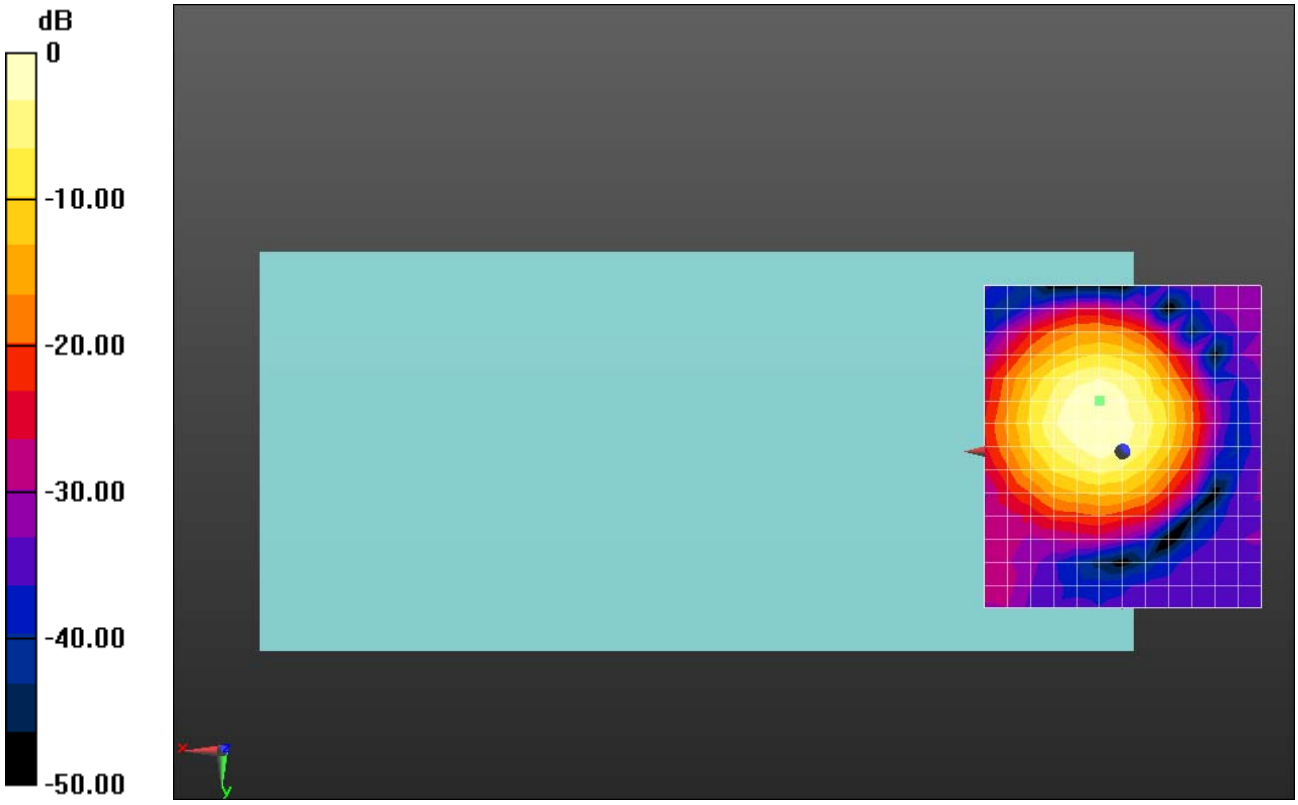
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.5GHz_802.11a 6Mbps_AMR 23.85Kbps_Ch120_Z

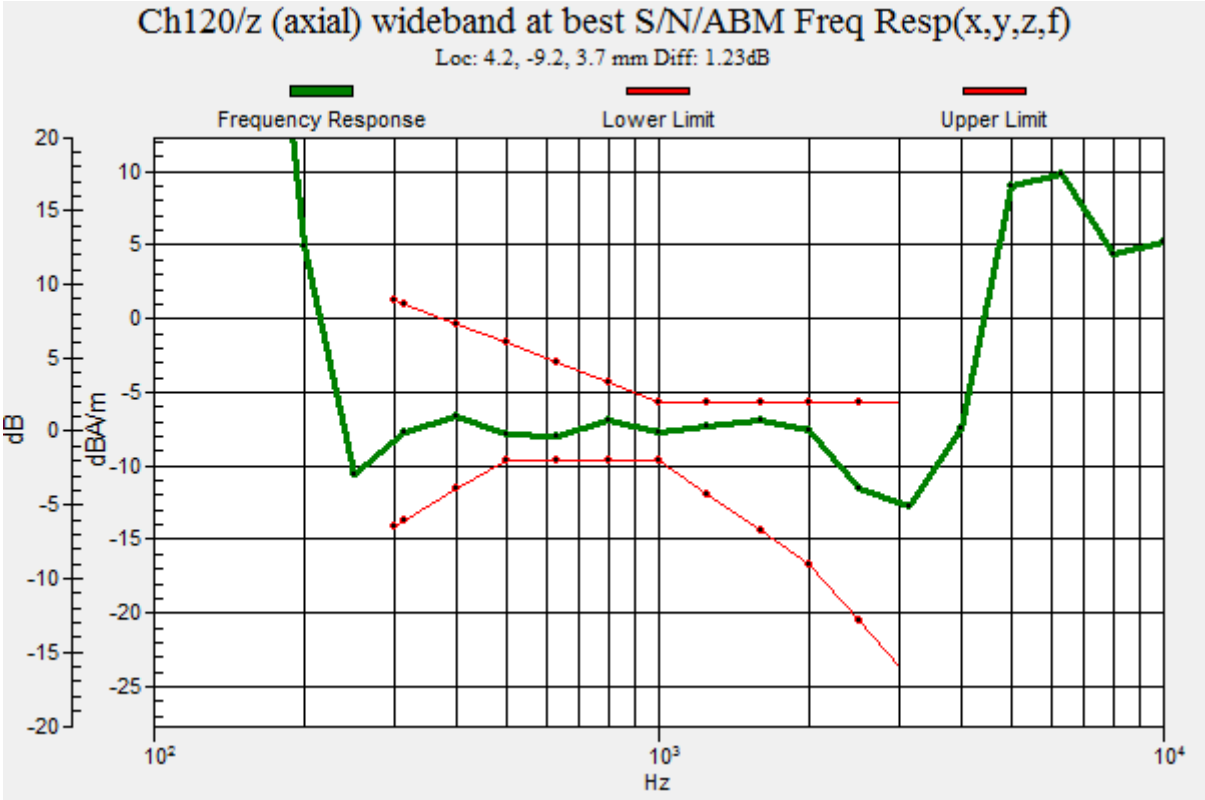
Communication System: UID 10317 - AAA, IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle); Frequency: 5600 MHz;Duty Cycle: 1:6.85488
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch120/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 37.81 dB
ABM1 comp = -5.03 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 77.68 = 37.81 dB


Ch120/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 1.23dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
10²
10³
10⁴

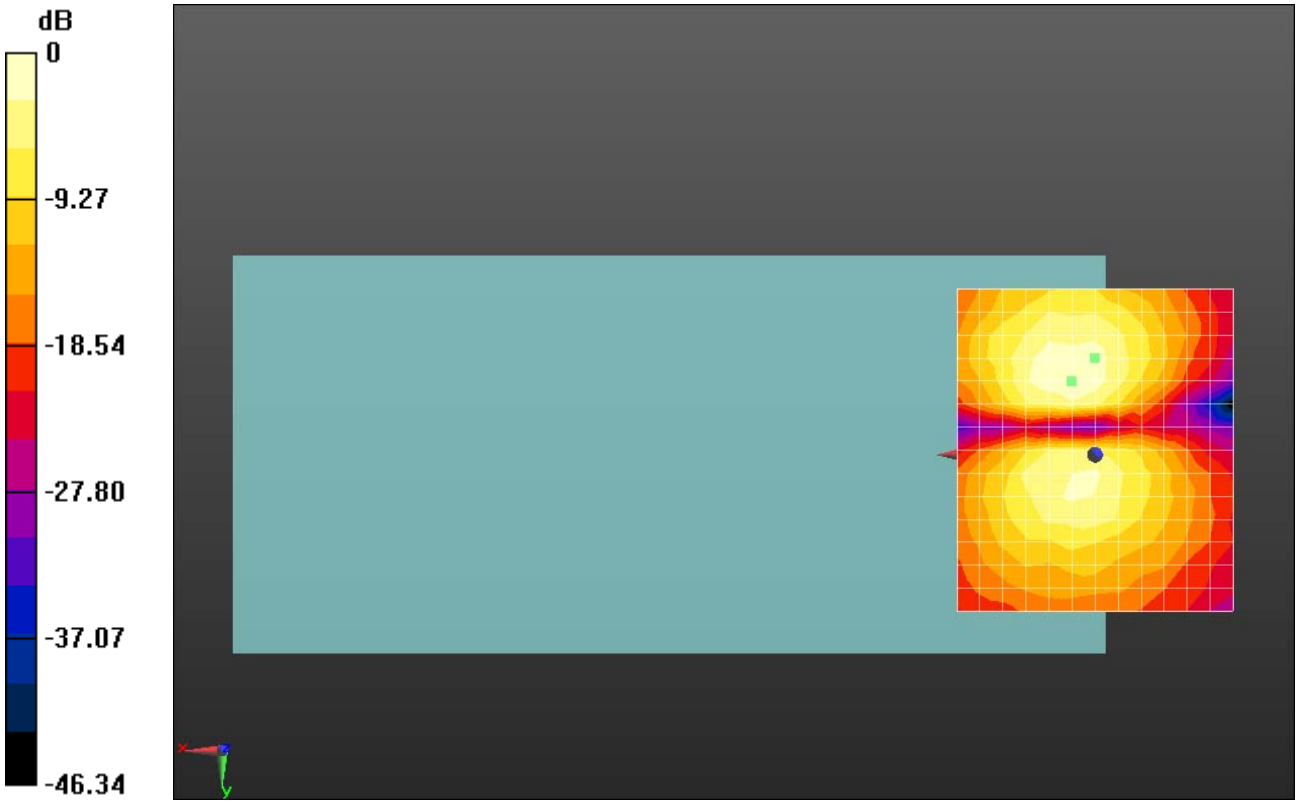
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.5GHz_802.11a 6Mbps_AMR 23.85Kbps_Ch120_Y

Communication System: UID 10317 - AAA, IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle); Frequency: 5600 MHz;Duty Cycle: 1:6.85488
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch120/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 35.79 dB
ABM1 comp = -12.60 dBA/m
BWC Factor = 0.18 dB
Location: 0, -17.5, 3.7 mm



0 dB = 61.57 = 35.79 dB

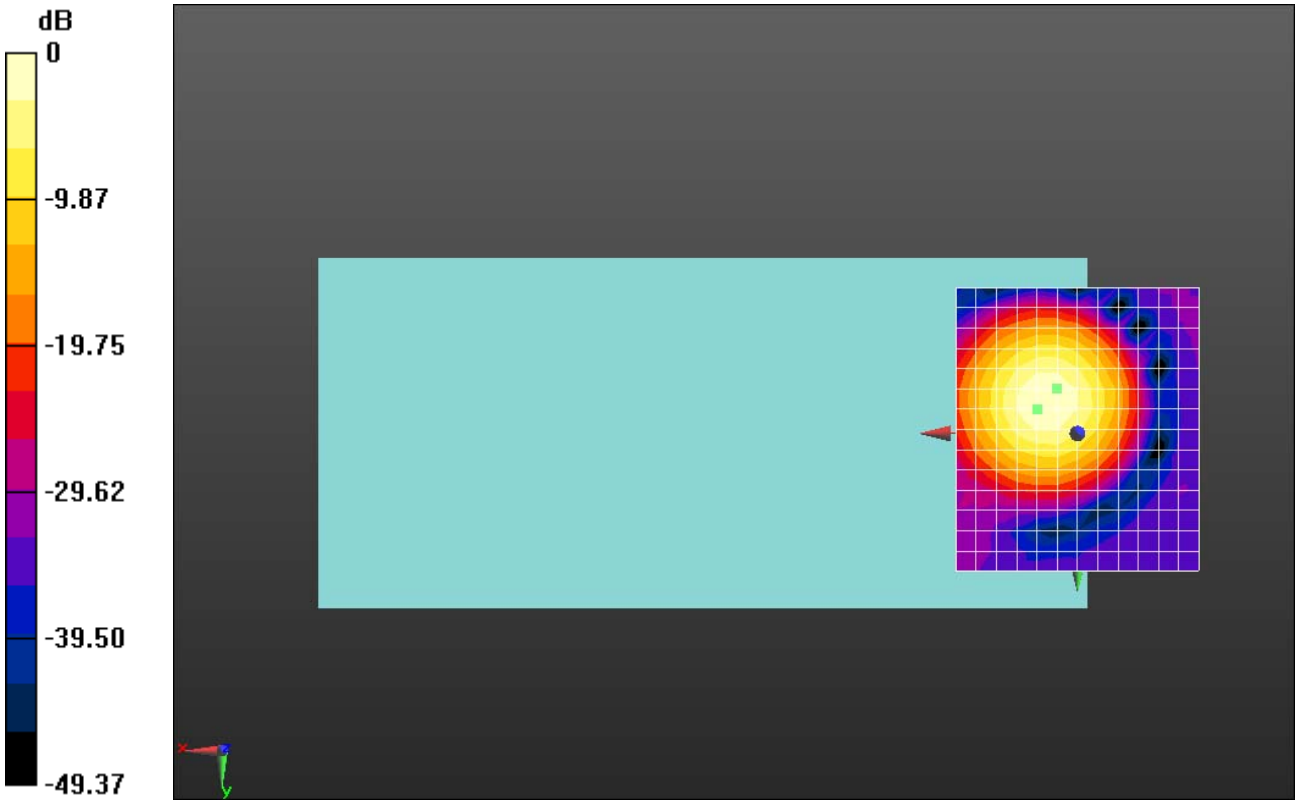
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.8GHz_802.11a 6Mbps_AMR 23.85Kbps_Ch157_Z

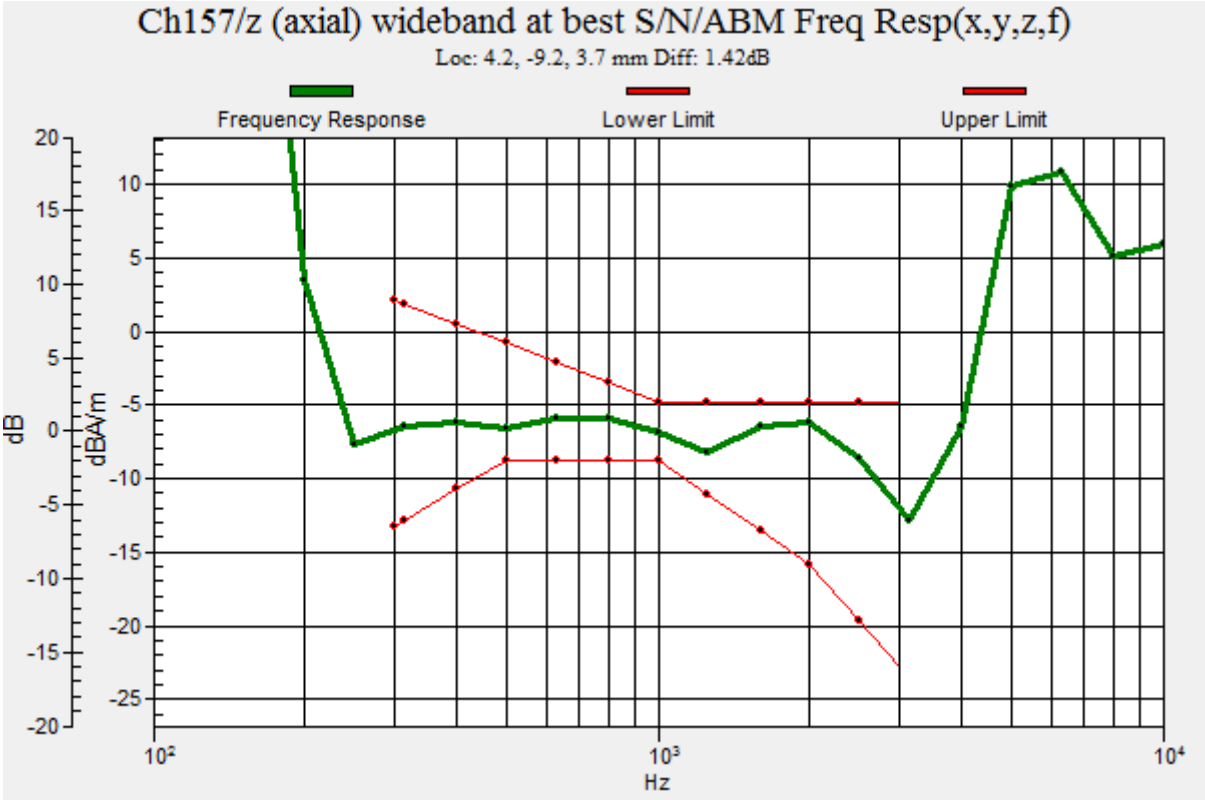
Communication System: UID 10317 - AAA, IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle); Frequency: 5785 MHz;Duty Cycle: 1:6.85488
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch157/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 37.88 dB
ABM1 comp = -6.71 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -9.2, 3.7 mm



0 dB = 78.32 = 37.88 dB


Ch157/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -9.2, 3.7 mm Diff: 1.42dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
-25
10²
10³
10⁴

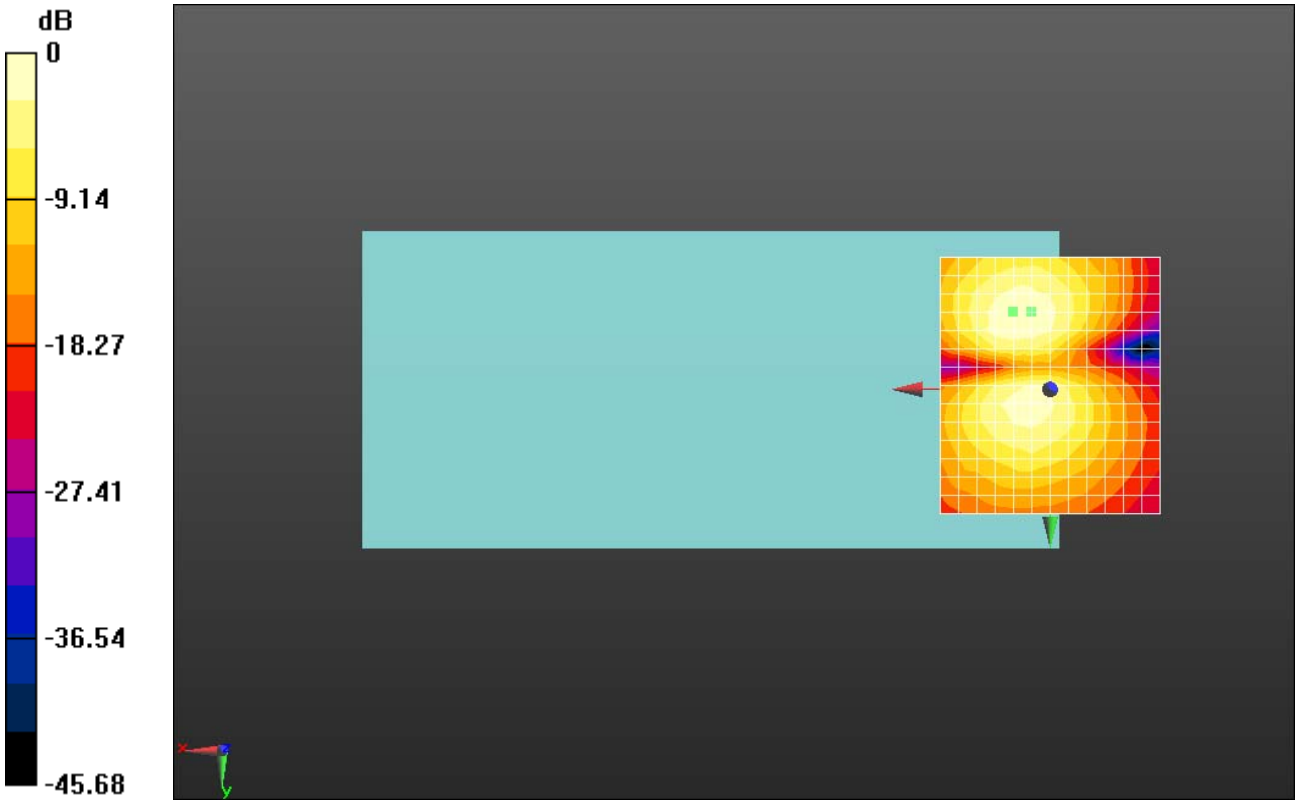
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.8GHz_802.11a 6Mbps_AMR 23.85Kbps_Ch157_Y

Communication System: UID 10317 - AAA, IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle); Frequency: 5785 MHz;Duty Cycle: 1:6.85488
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch157/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 35.03 dB
ABM1 comp = -12.69 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -17.5, 3.7 mm



0 dB = 56.43 = 35.03 dB

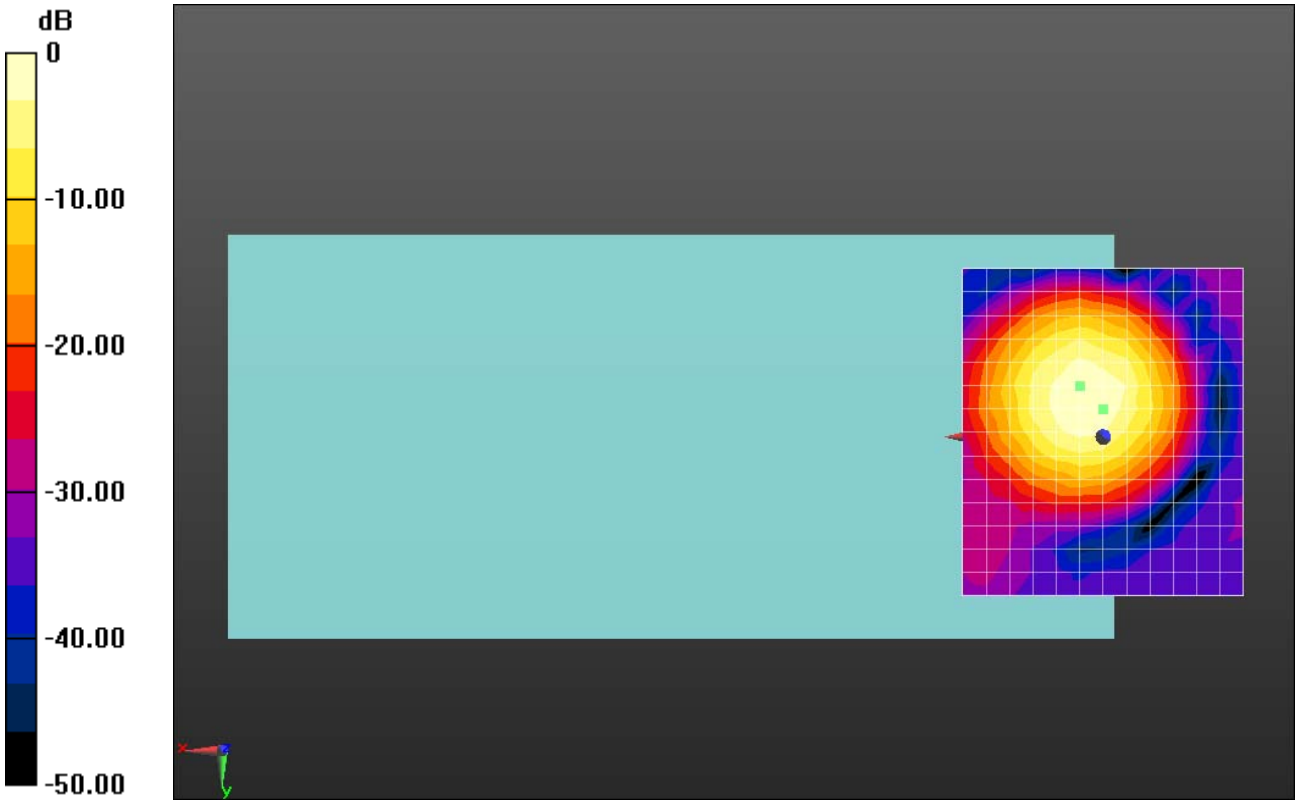
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.3GHz_802.11n-HT20 MCS0_AMR 23.85Kbps_Ch60_Z

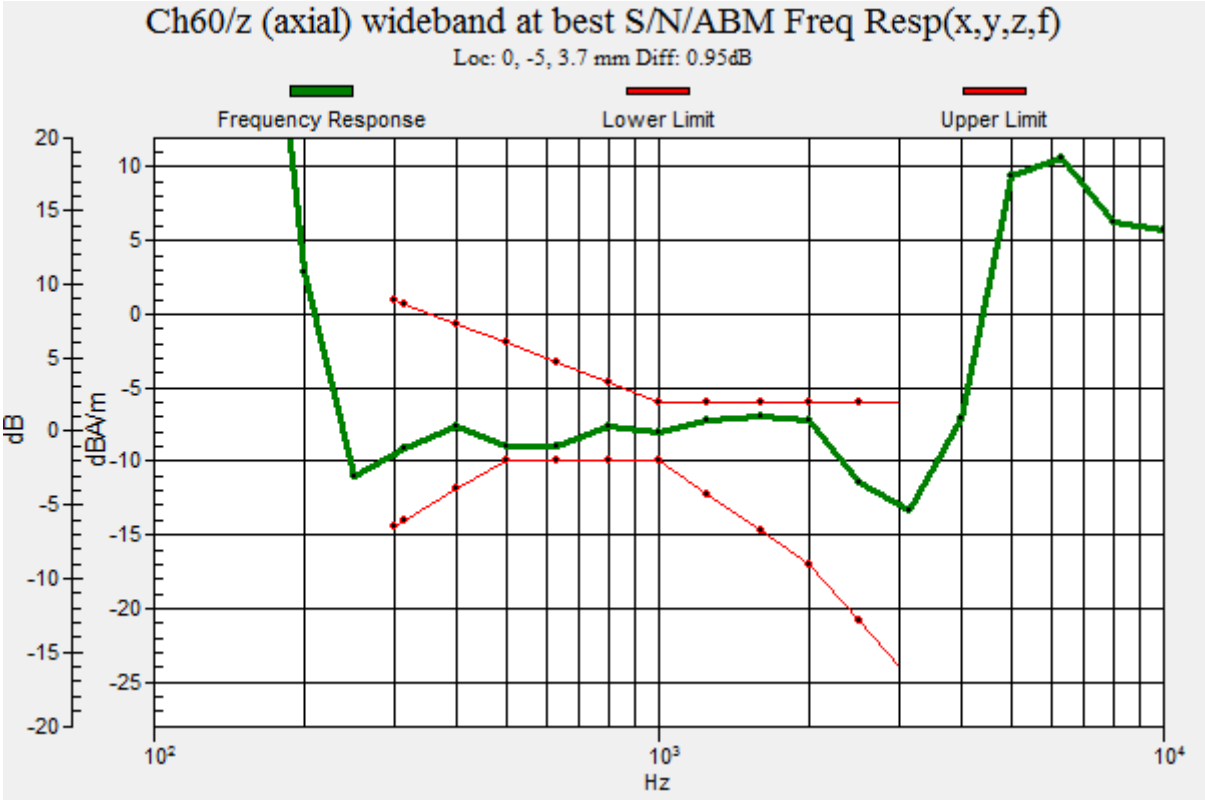
Communication System: UID 10193 - CAA, IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK);
Frequency: 5300 MHz;Duty Cycle: 1:6.44169
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch60/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 37.05 dB
ABM1 comp = -5.34 dBA/m
BWC Factor = 0.18 dB
Location: 0, -5, 3.7 mm



0 dB = 71.17 = 37.05 dB


Ch60/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 0, -5, 3.7 mm Diff: 0.95dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
10²
10³
10⁴

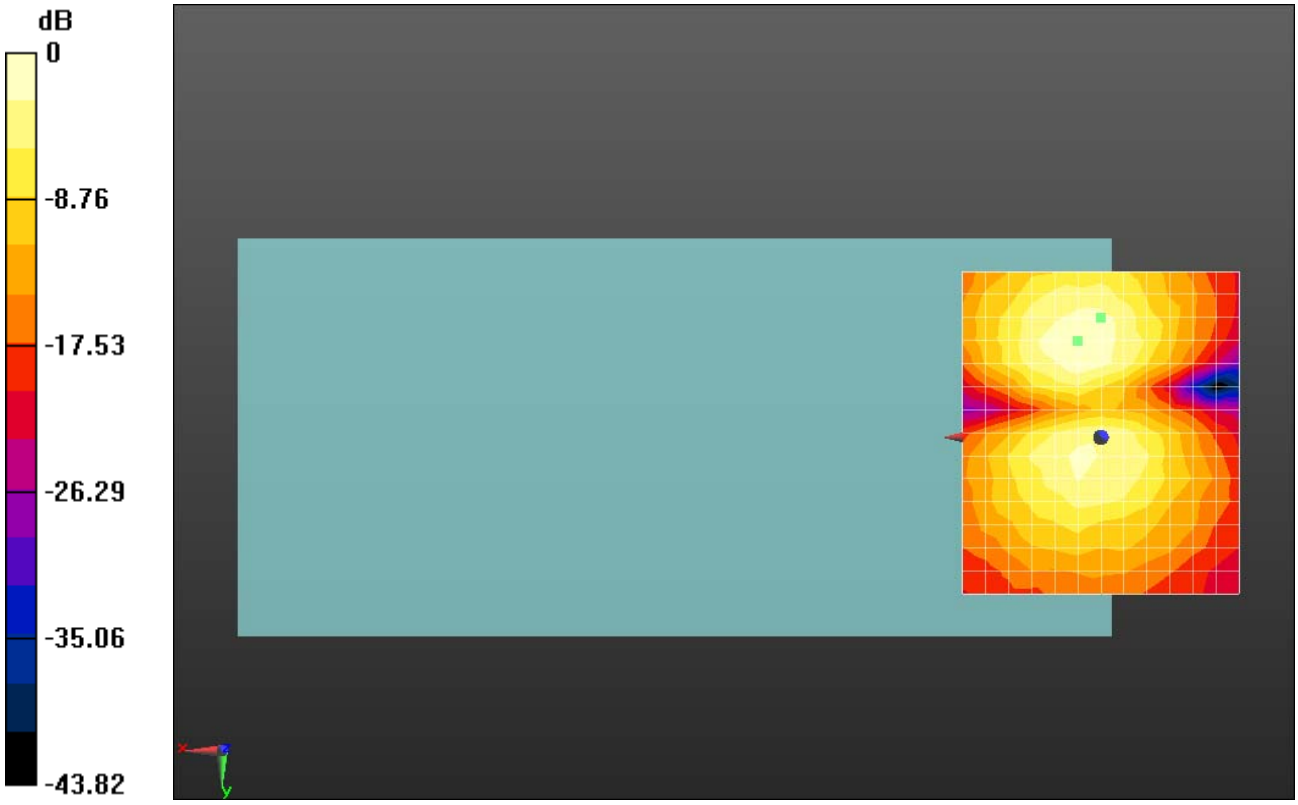
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.3GHz_802.11n-HT20 MCS0_AMR 23.85Kbps_Ch60_Y

Communication System: UID 10193 - CAA, IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK);
Frequency: 5300 MHz;Duty Cycle: 1:6.44169
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch60/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 34.88 dB
ABM1 comp = -13.35 dBA/m
BWC Factor = 0.18 dB
Location: 0, -21.7, 3.7 mm



0 dB = 55.48 = 34.88 dB

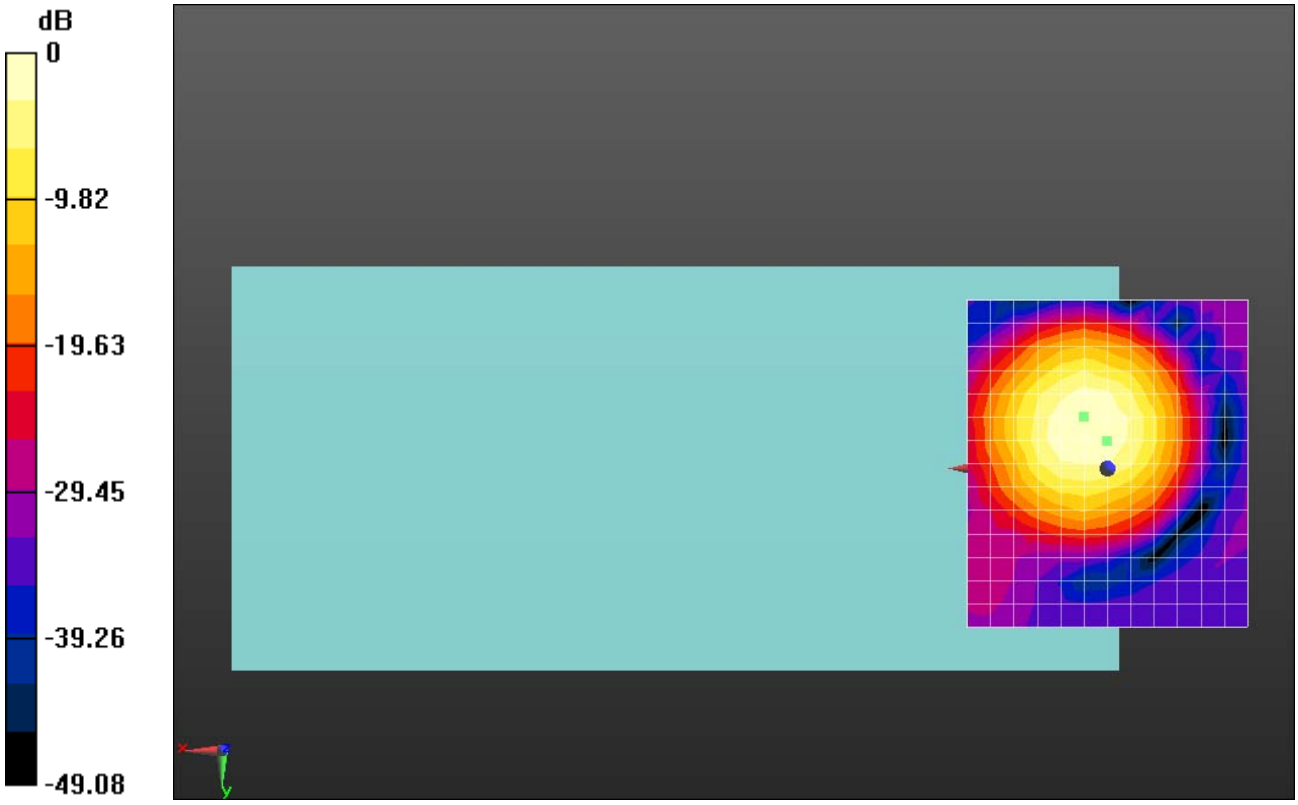
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.3GHz_802.11n-HT40 MCS0_AMR 23.85Kbps_Ch62_Z

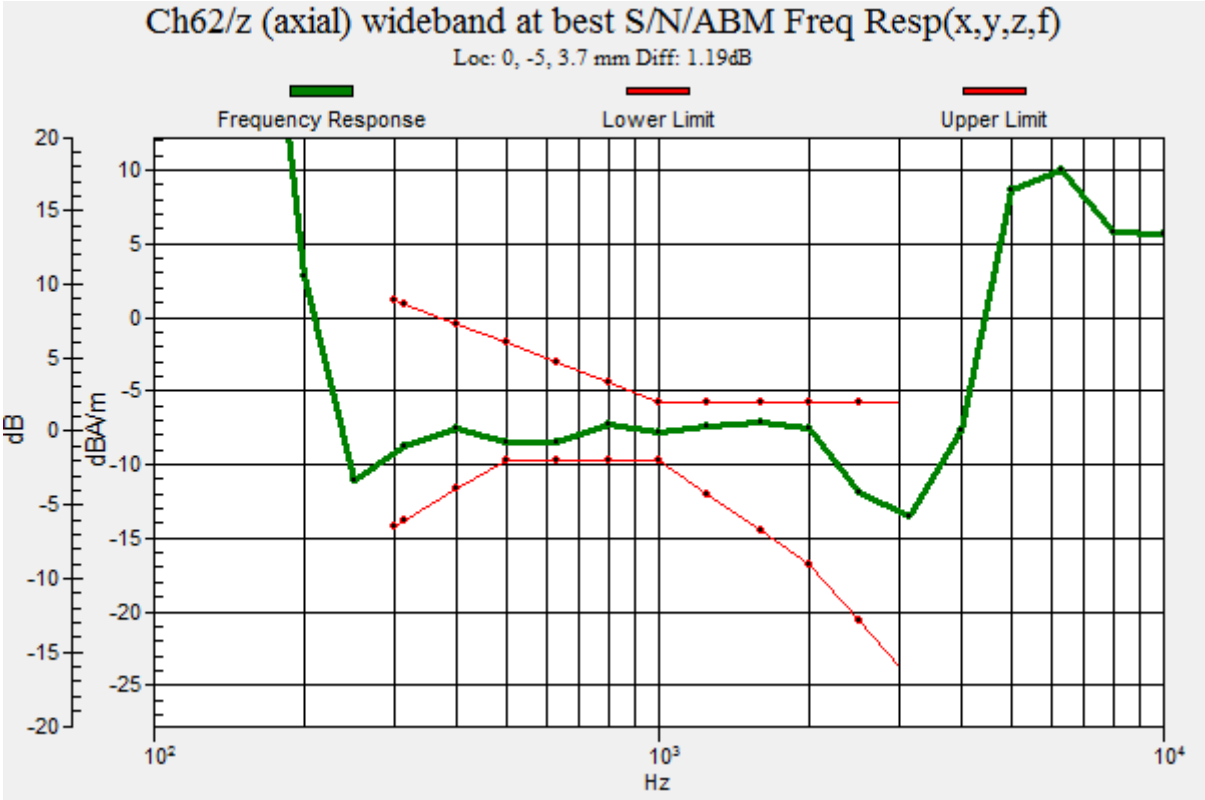
Communication System: UID 10114 - CAA, IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK); Frequency: 5310 MHz;Duty Cycle: 1:6.45654
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch62/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 36.36 dB
ABM1 comp = -5.69 dBA/m
BWC Factor = 0.18 dB
Location: 0, -5, 3.7 mm



0 dB = 65.80 = 36.36 dB


Ch62/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 0, -5, 3.7 mm Diff: 1.19dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
10²
10³
10⁴

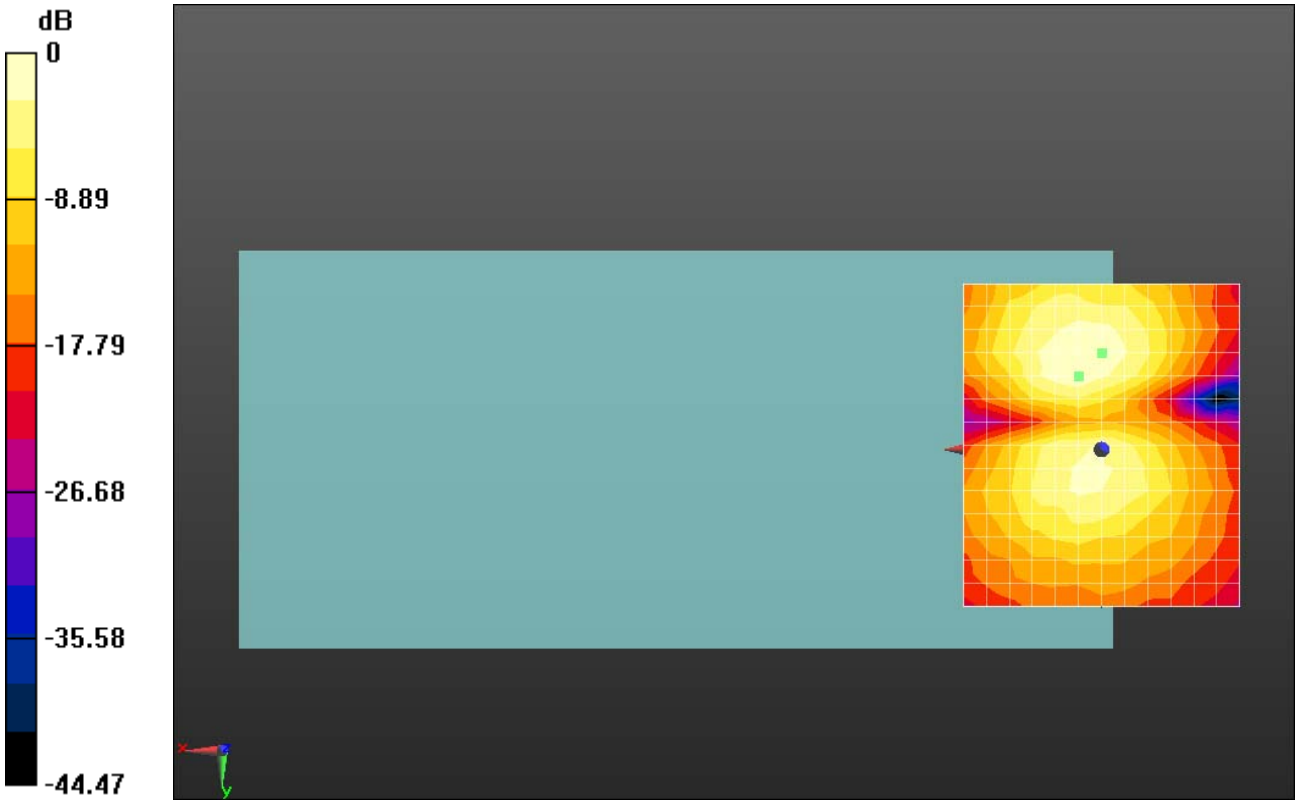
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.3GHz_802.11n-HT40 MCS0_AMR 23.85Kbps_Ch62_Y

Communication System: UID 10114 - CAA, IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK); Frequency: 5310 MHz;Duty Cycle: 1:6.45654
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch62/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 35.24 dB
ABM1 comp = -11.81 dBA/m
BWC Factor = 0.18 dB
Location: 0, -17.5, 3.7 mm



0 dB = 57.80 = 35.24 dB

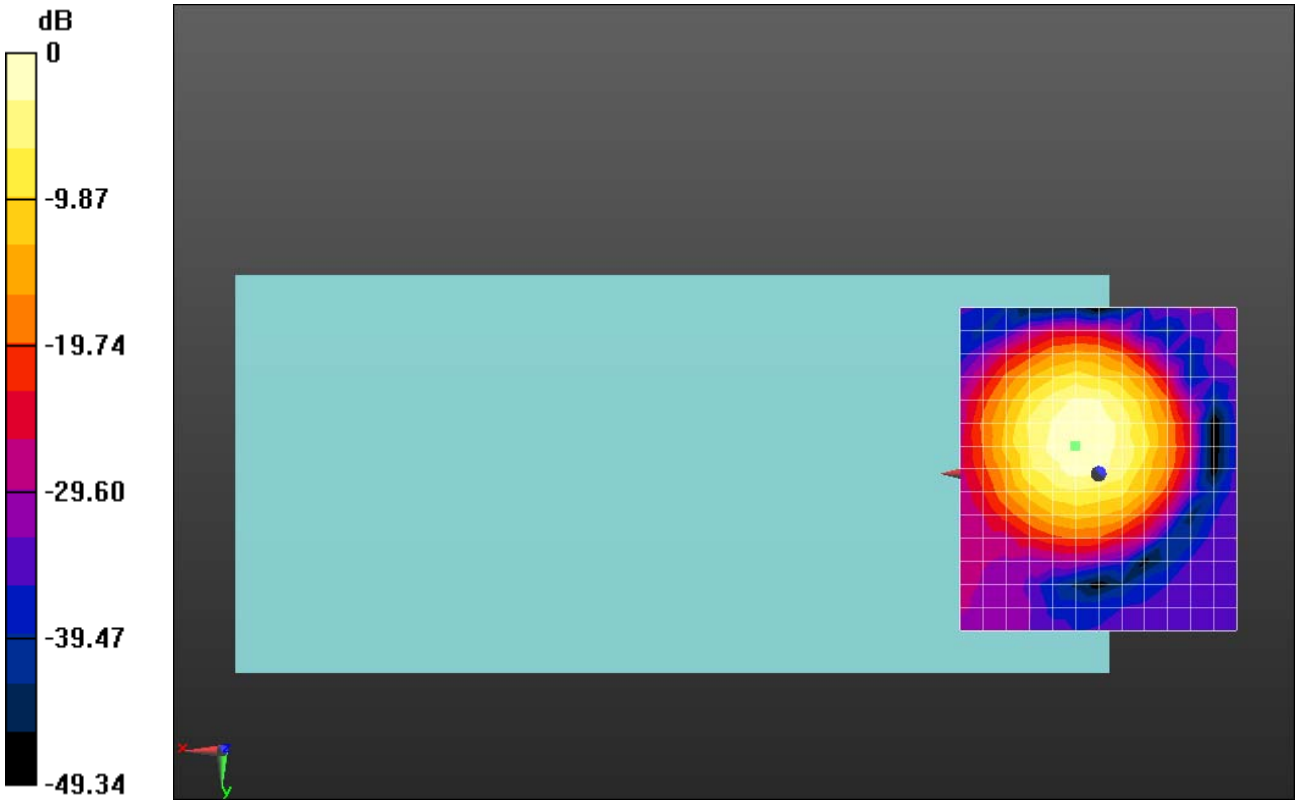
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.3GHz_802.11ac-VHT20 MCS0_AMR 23.85Kbps_Ch60_Z

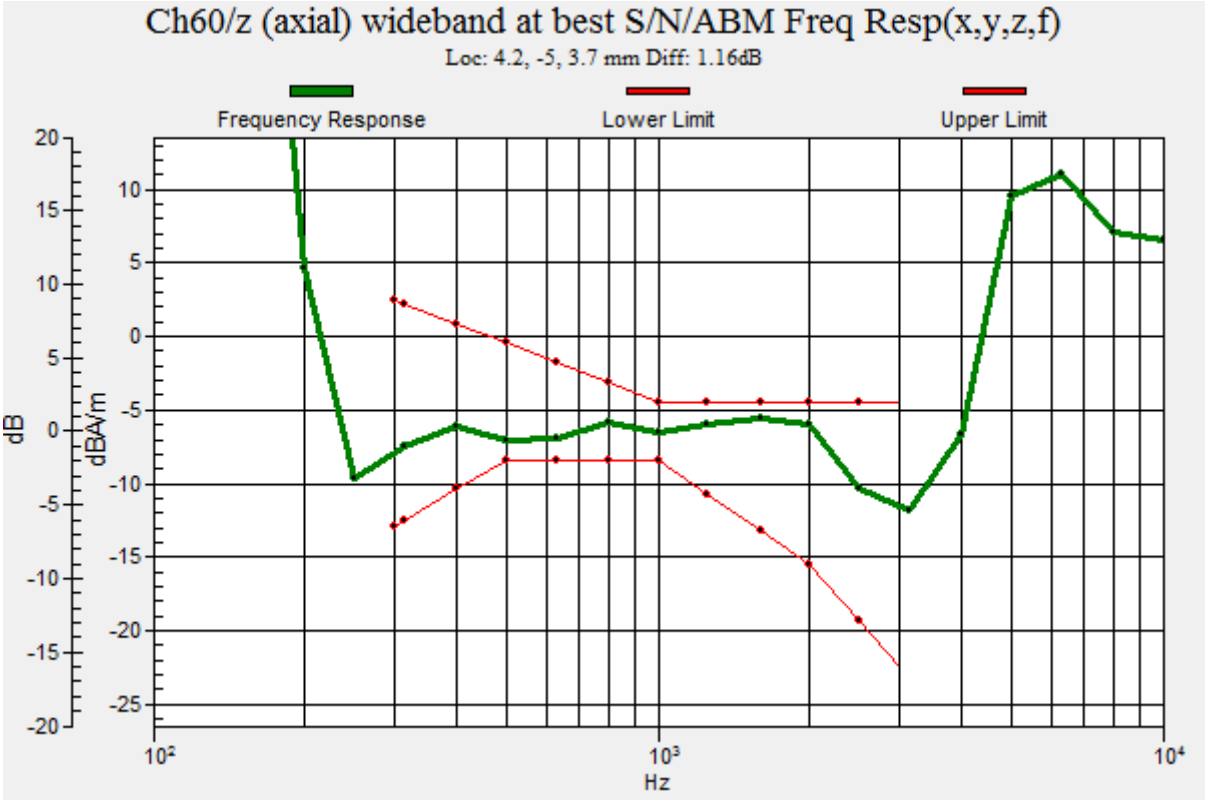
Communication System: UID 10400 - AAA, IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle); Frequency: 5300 MHz;Duty Cycle: 1:6.87068
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch60/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 36.10 dB
ABM1 comp = -5.13 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -5, 3.7 mm



0 dB = 63.84 = 36.10 dB


Ch60/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -5, 3.7 mm Diff: 1.16dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
-25
10²
10³
10⁴

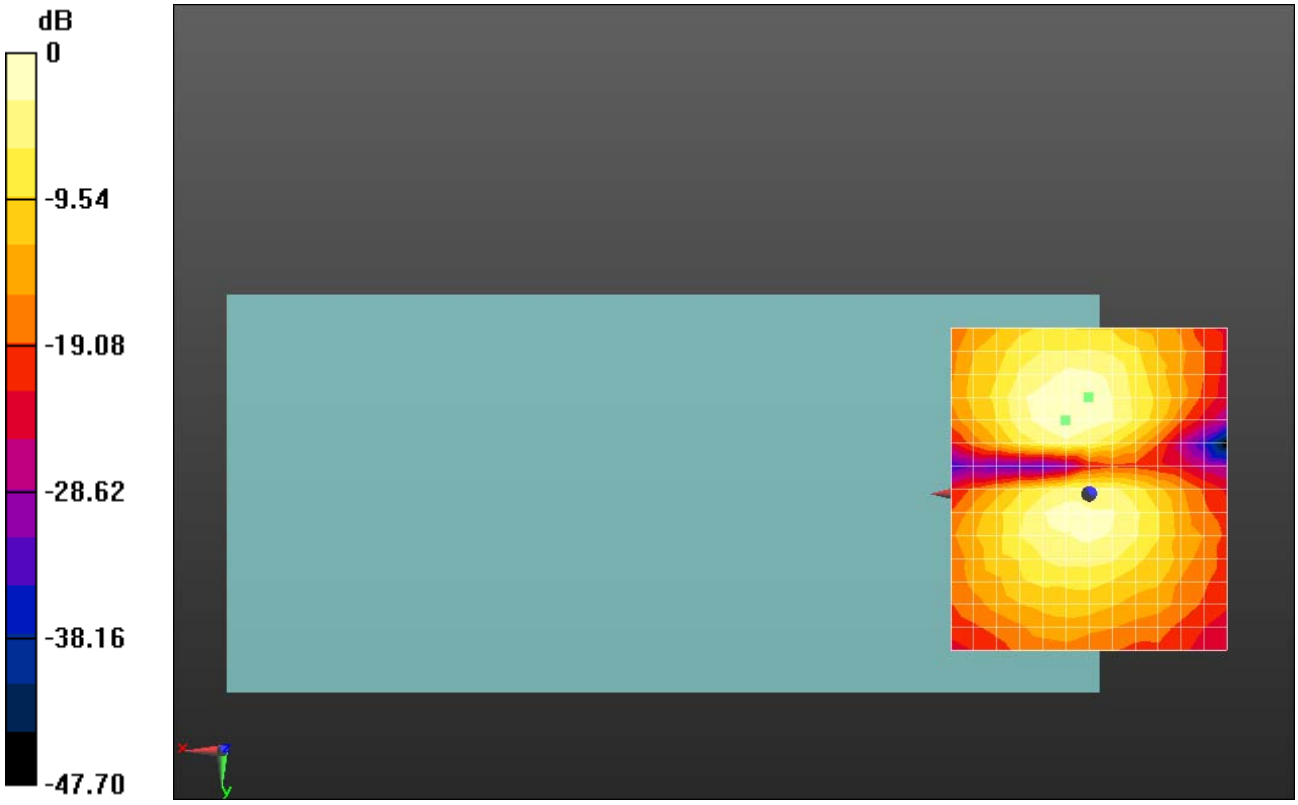
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.3GHz_802.11ac-VHT20 MCS0_AMR 23.85Kbps_Ch60_Y

Communication System: UID 10400 - AAA, IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle); Frequency: 5300 MHz;Duty Cycle: 1:6.87068
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch60/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 35.07 dB
ABM1 comp = -12.04 dBA/m
BWC Factor = 0.18 dB
Location: 0, -17.5, 3.7 mm



0 dB = 56.69 = 35.07 dB

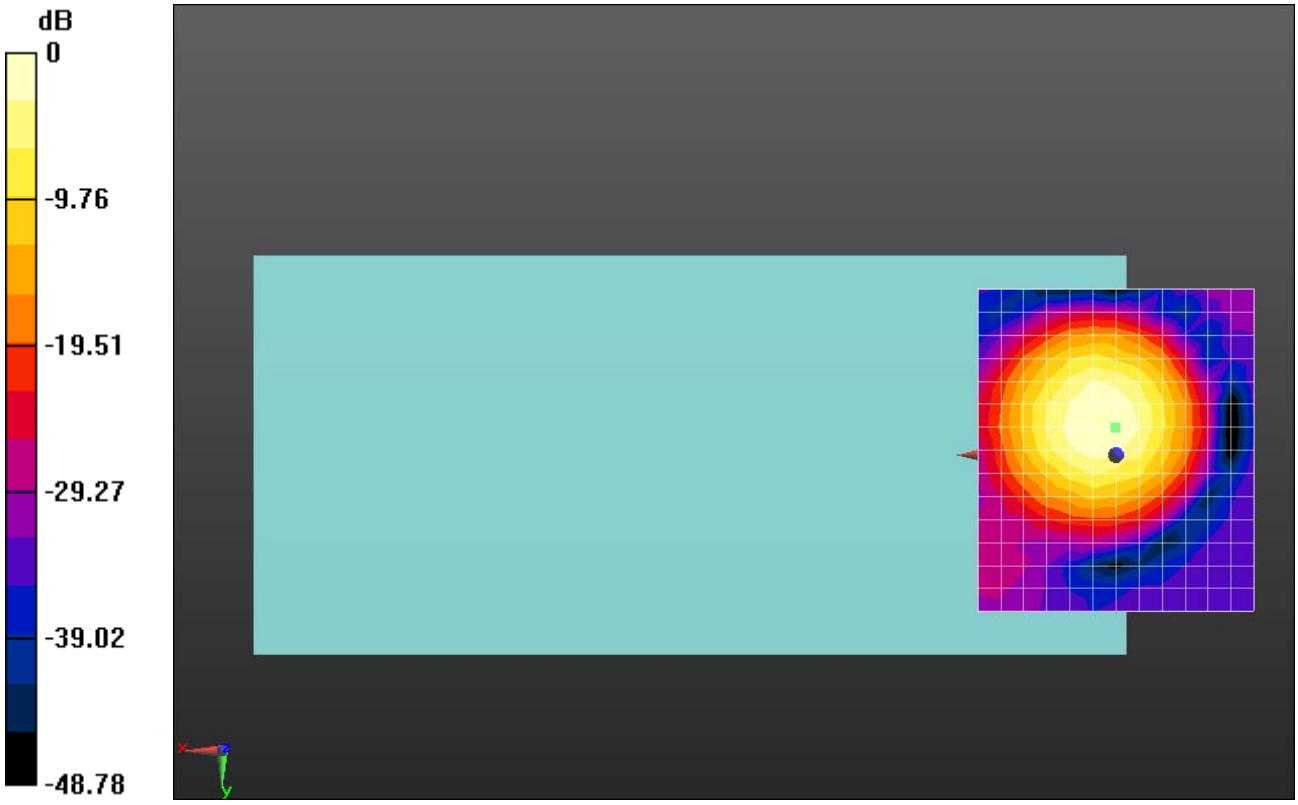
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.3GHz_802.11ac-VHT40 MCS0_AMR 23.85Kbps_Ch62_Z

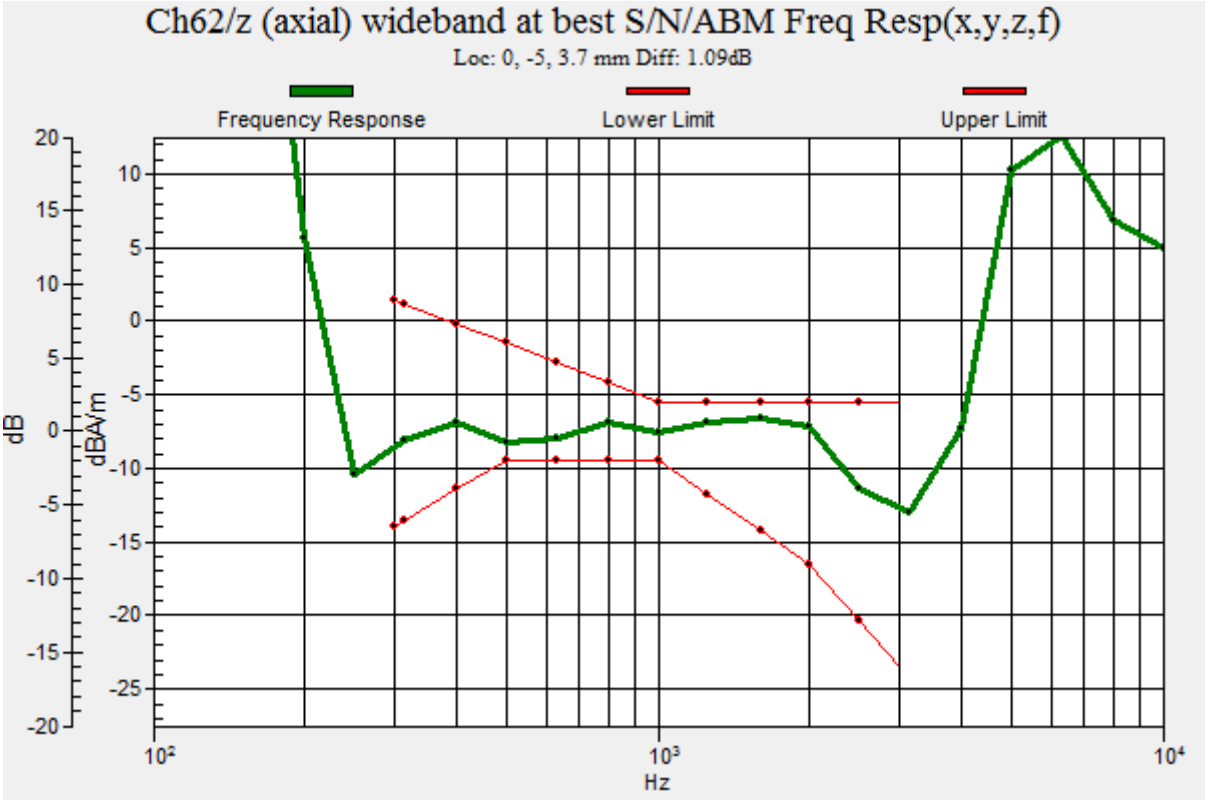
Communication System: UID 10401 - AAA, IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle); Frequency: 5310 MHz;Duty Cycle: 1:7.24436
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch62/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 36.98 dB
ABM1 comp = -4.70 dBA/m
BWC Factor = 0.18 dB
Location: 0, -5, 3.7 mm



0 dB = 70.60 = 36.98 dB


Ch62/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 0, -5, 3.7 mm Diff: 1.09dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
10²
10³
10⁴

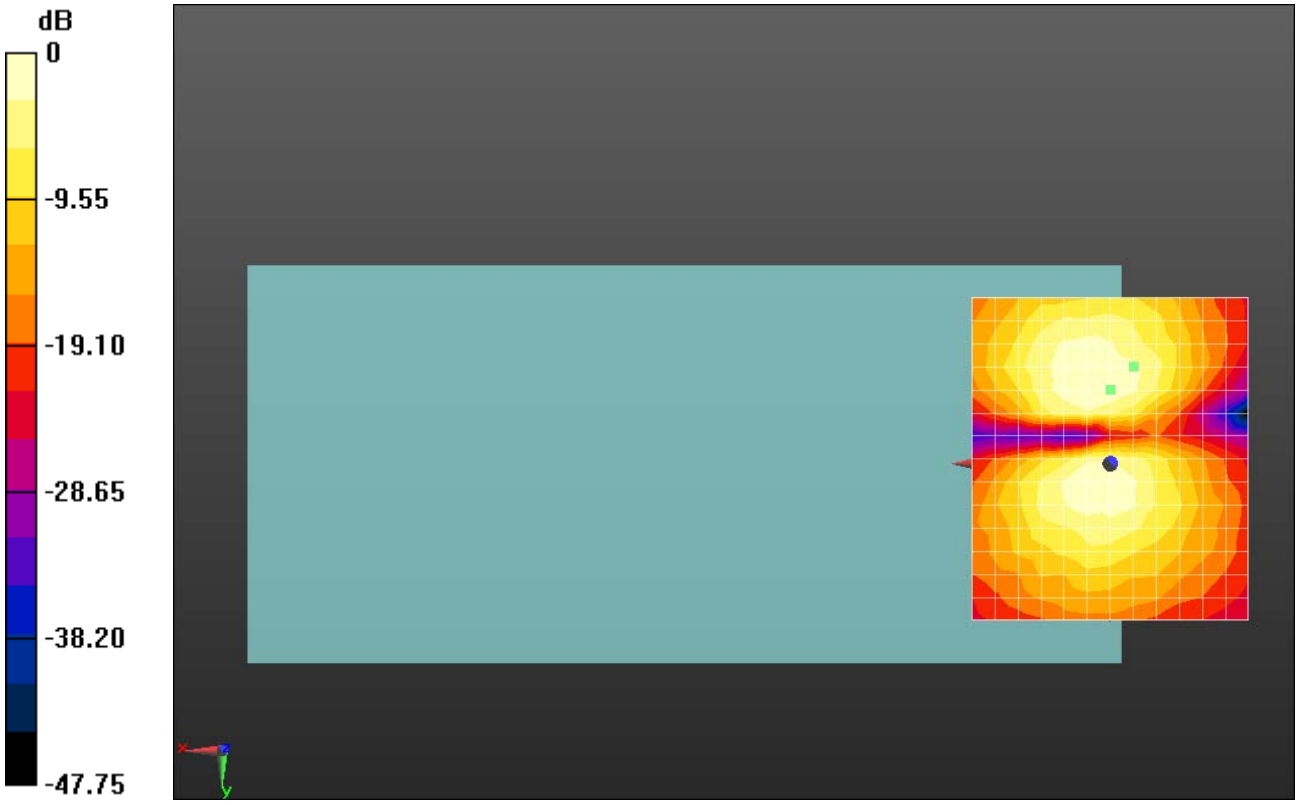
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.3GHz_802.11ac-VHT40 MCS0_AMR 23.85Kbps_Ch62_Y

Communication System: UID 10401 - AAA, IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle); Frequency: 5310 MHz;Duty Cycle: 1:7.24436
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch62/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 35.16 dB
ABM1 comp = -14.13 dBA/m
BWC Factor = 0.18 dB
Location: -4.2, -17.5, 3.7 mm



0 dB = 57.25 = 35.16 dB

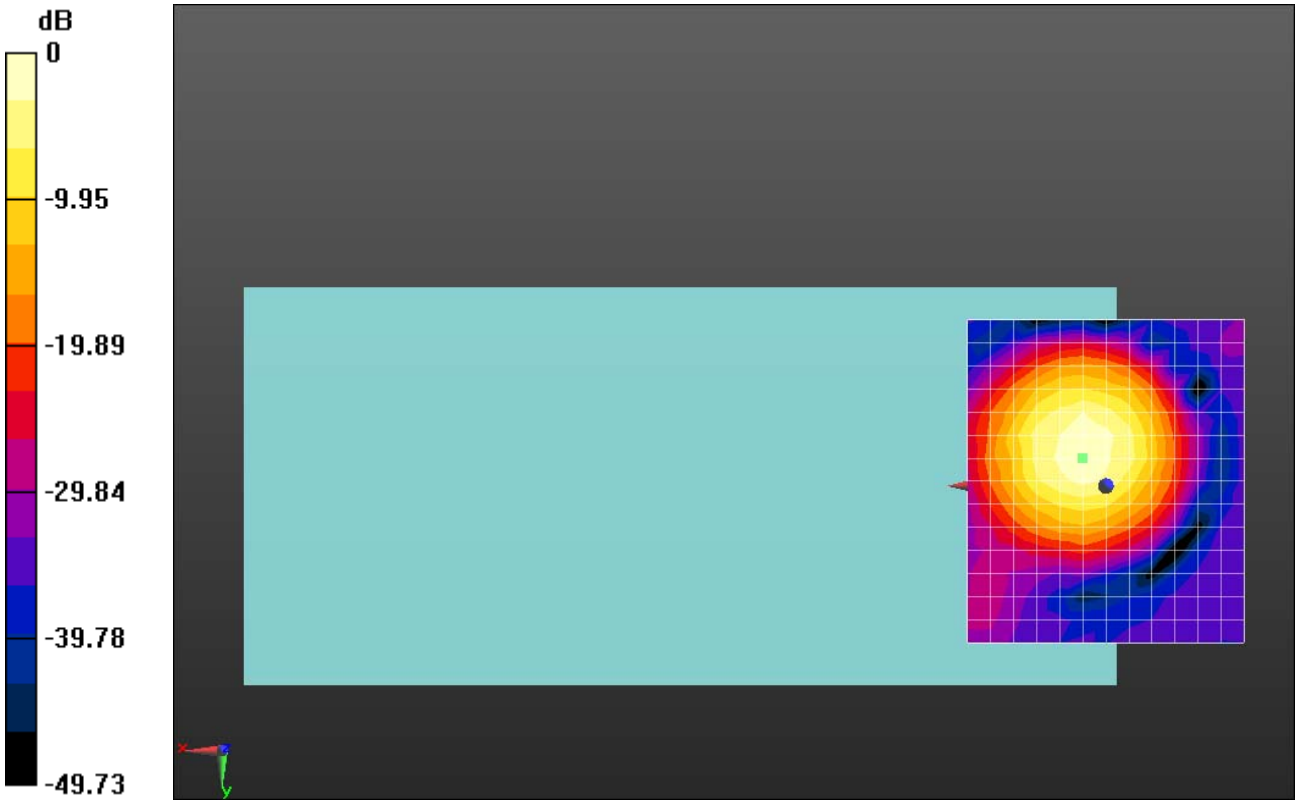
Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

HAC_T-Coil_VoWiFi 5.3GHz_802.11ac-VHT80 MCS0_AMR 23.85Kbps_Ch58_Z

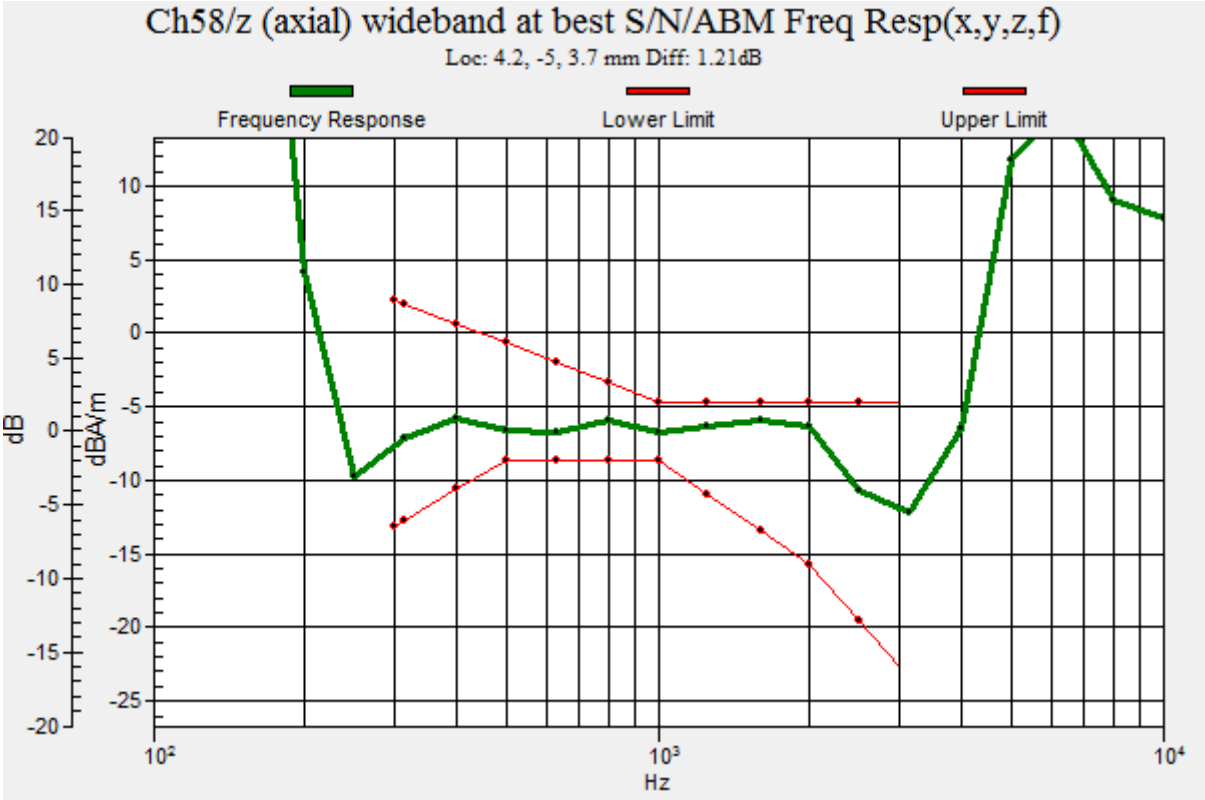
Communication System: UID 10402 - AAA, IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle); Frequency: 5290 MHz;Duty Cycle: 1:7.12853
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch58/z (axial) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm
ABM1/ABM2 = 37.20 dB
ABM1 comp = -3.89 dBA/m
BWC Factor = 0.18 dB
Location: 4.2, -5, 3.7 mm



0 dB = 72.48 = 37.20 dB


Ch58/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -5, 3.7 mm Diff: 1.21dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
-25
10²
10³
10⁴

Test Laboratory: Shenzhen Morlab Communications Technology Co., Ltd. Date: 2023.07.04

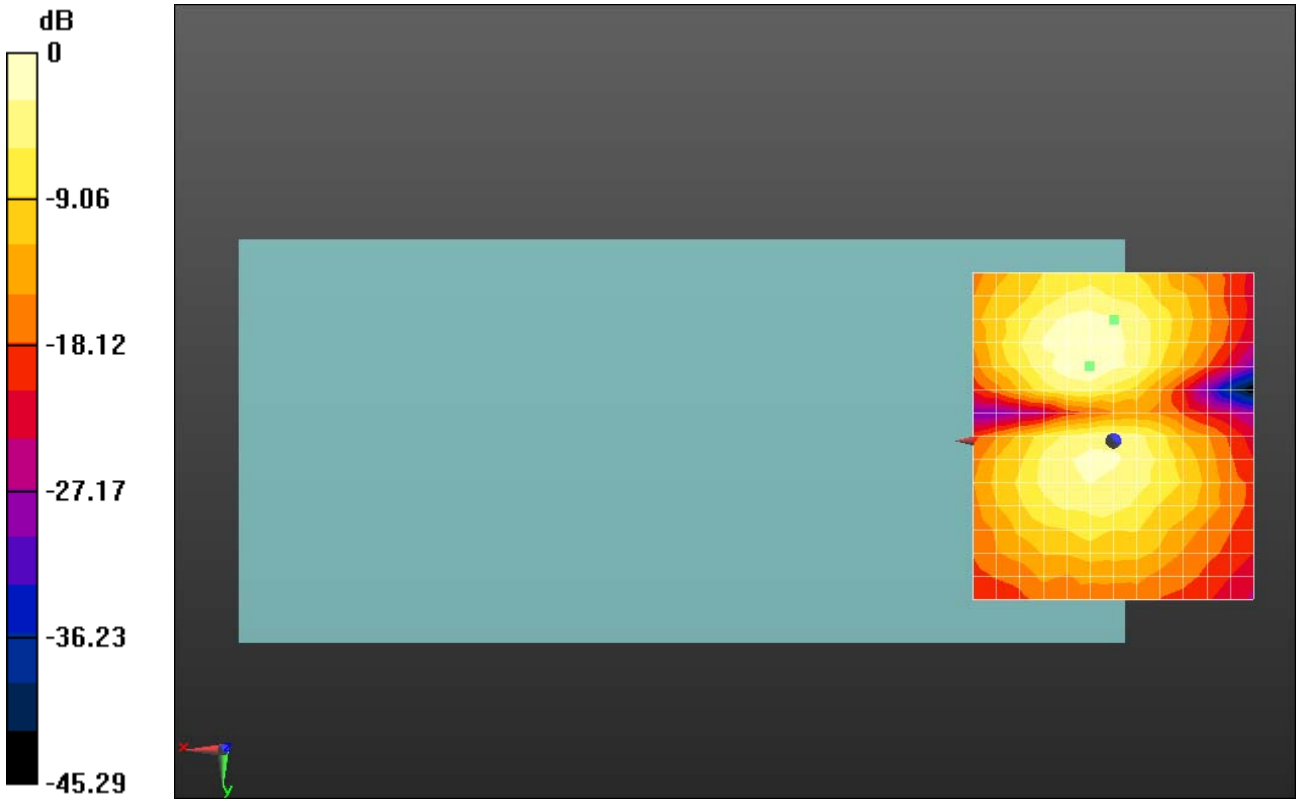
HAC_T-Coil_VoWiFi 5.3GHz_802.11ac-VHT80 MCS0_AMR 23.85Kbps_Ch58_Y

Communication System: UID 10402 - AAA, IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle); Frequency: 5290 MHz;Duty Cycle: 1:7.12853
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.2 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3128; ; Calibrated: 2022.07.19
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1643; Calibrated: 2023.02.22
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Ch58/y (transversal) 4.2mm 50 x 50/ABM SNR(x,y,z) (13x15x1): Measurement grid: dx=10mm, dy=10mm

ABM1/ABM2 = 34.68 dB
ABM1 comp = -13.73 dBA/m
BWC Factor = 0.18 dB
Location: 0, -21.7, 3.7 mm



0 dB = 54.17 = 34.68 dB