Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

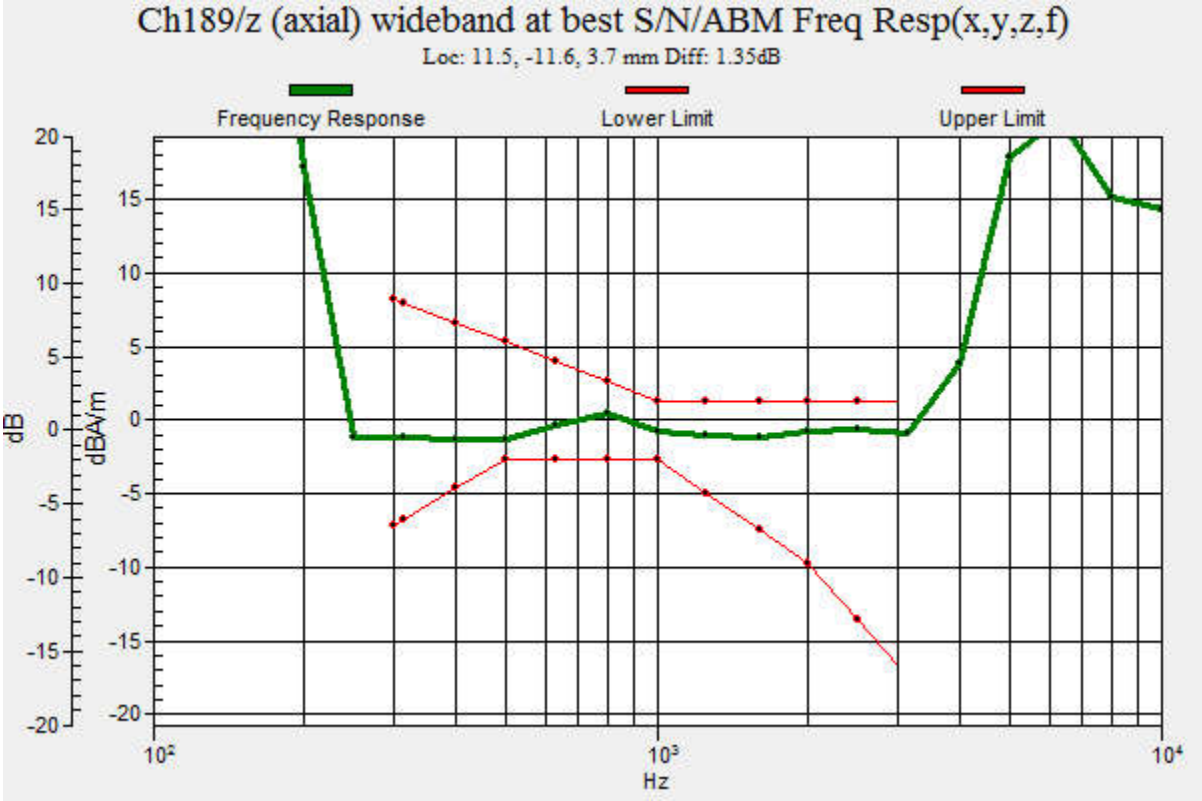
01_HAC T-Coil_GSM850_Voice_Ch189_Z

Communication System: UID 0, Generic GSM (0); Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch189/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 23.85 dB
ABM1 comp = -0.48 dBA/m
Location: 11.7, -11.7, 3.7 mm

0 dB = 15.58 = 23.85 dB


Ch189/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 11.5, -11.6, 3.7 mm Diff: 1.35dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

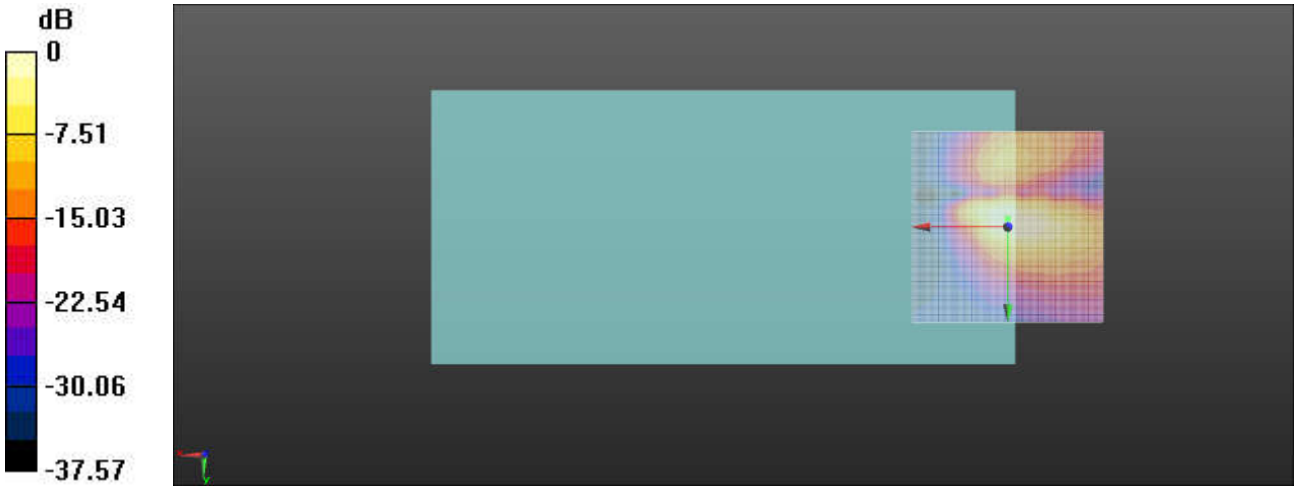
01_HAC T-Coil_GSM850_Voice_Ch189_Y

Communication System: UID 0, Generic GSM (0); Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch189/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 27.78 dB
ABM1 comp = -8.52 dBA/m
Location: 0, -2.1, 3.7 mm



0 dB = 24.50 = 27.78 dB

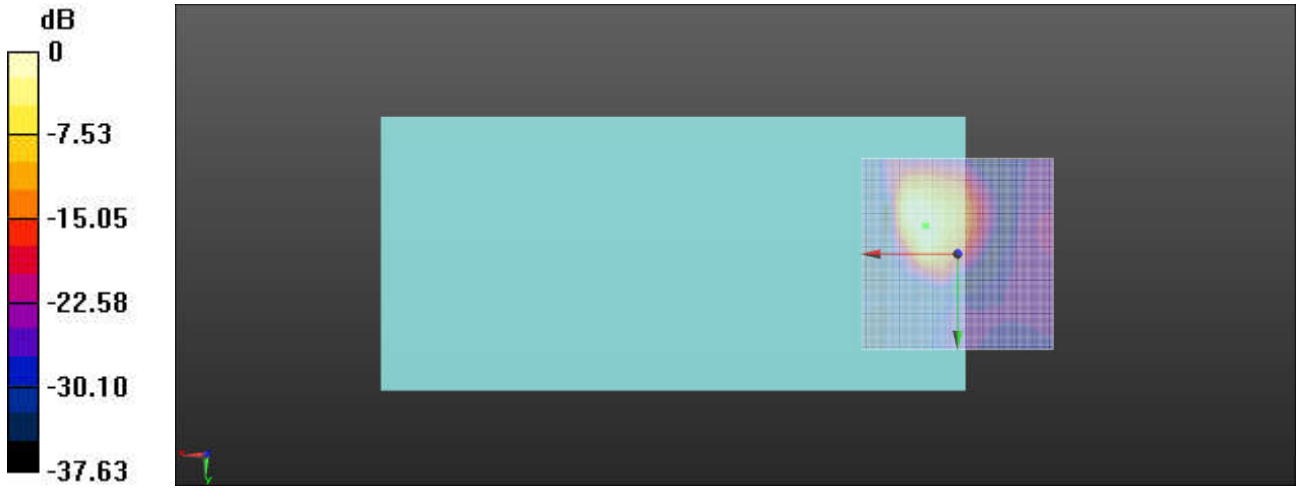
Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/29

1A_HAC T-Coil_GSM850_Voice_Ch189_Z

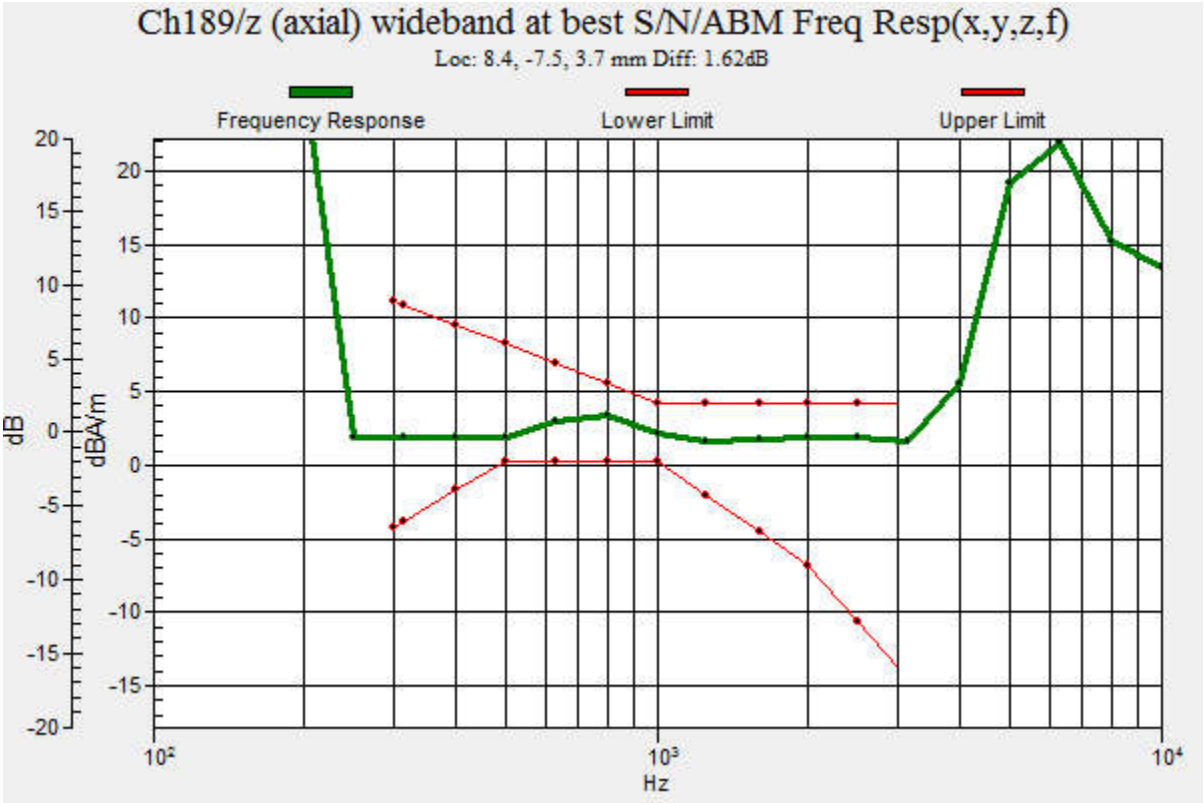
Communication System: UID 0, Generic GSM (0); Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch189/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 25.35 dB
ABM1 comp = 1.42 dBA/m
BWC Factor = 0.17 dB
Location: 8.3, -7.5, 3.7 mm



0 dB = 18.52 = 25.35 dB


Ch189/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 8.4, -7.5, 3.7 mm Diff: 1.62dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
10²
10³
10⁴

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/29

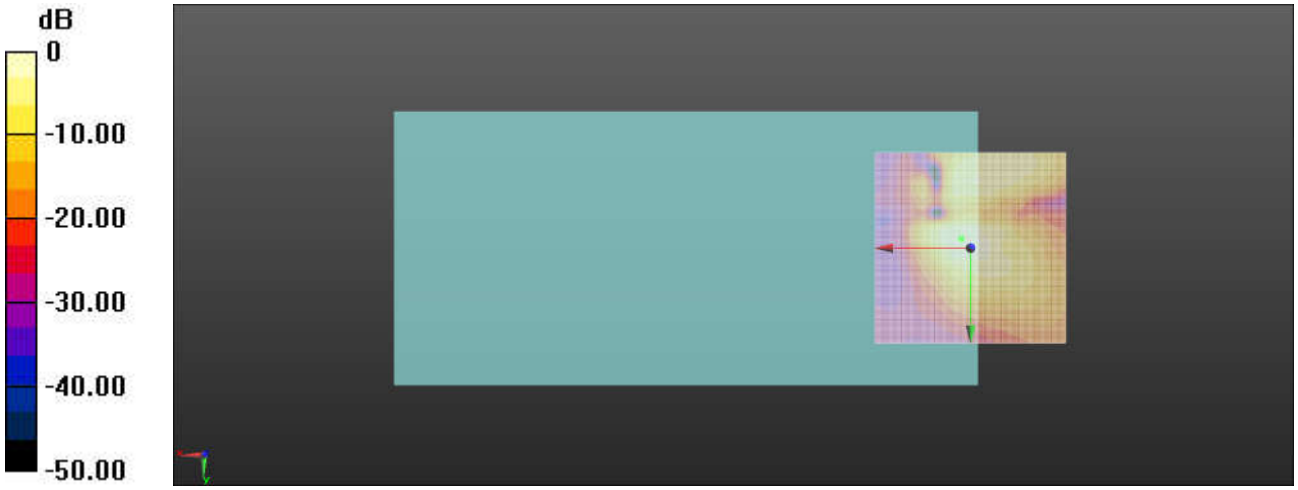
1A_HAC T-Coil_GSM850_Voice_Ch189_Y

Communication System: UID 0, Generic GSM (0); Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch189/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 26.51 dB
ABM1 comp = -6.87 dBA/m
BWC Factor = 0.17 dB
Location: 2.5, -2.5, 3.7 mm



0 dB = 21.17 = 26.51 dB

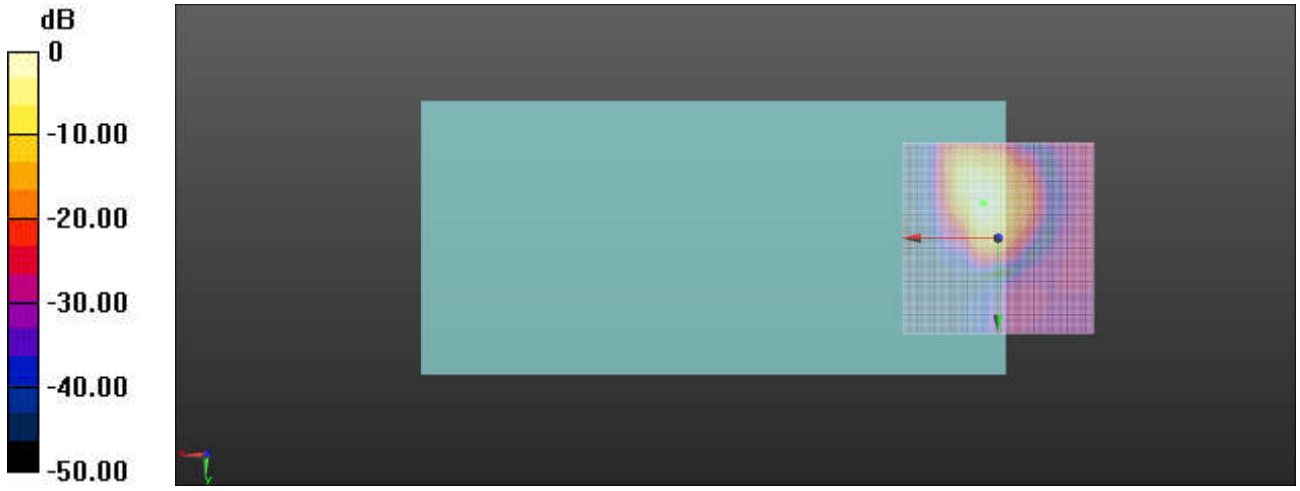
Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

02_HAC T-Coil_GSM1900_Voice_Ch661_Z

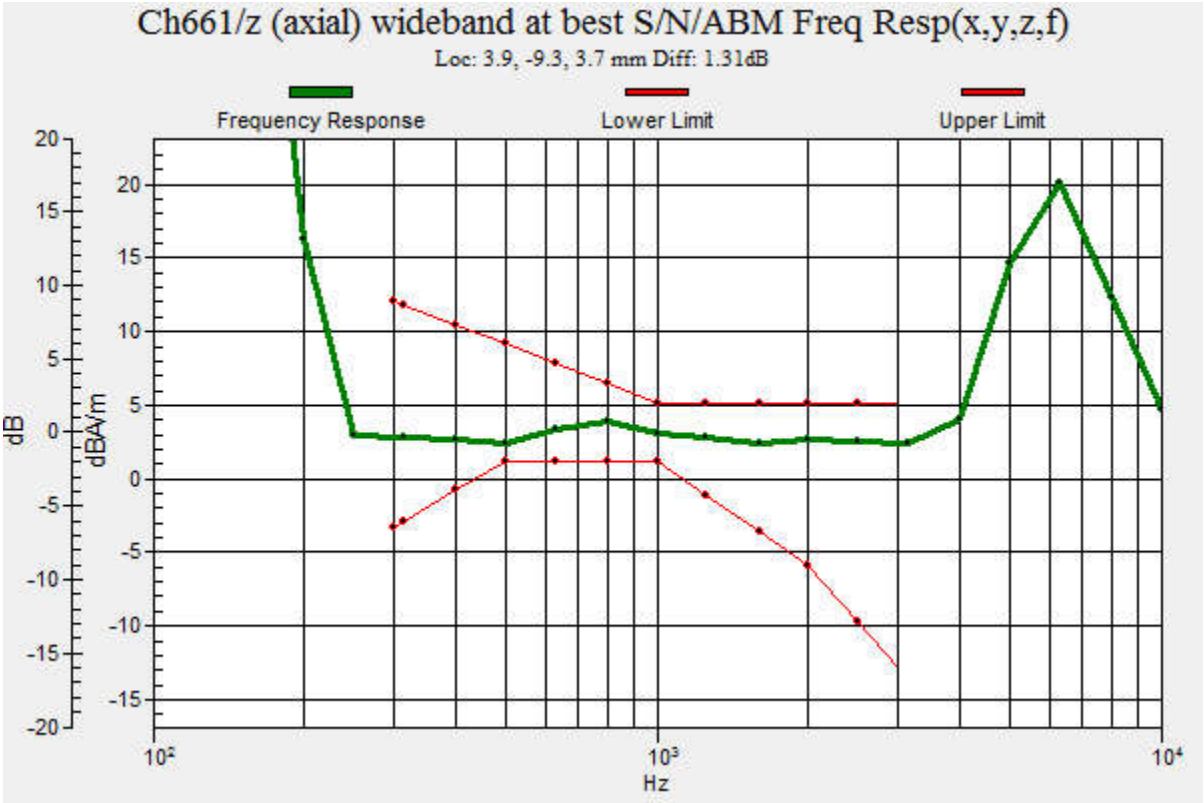
Communication System: UID 0, GPRS/EDGE10 (0); Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch661/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 39.41 dB
ABM1 comp = 1.55 dBA/m
Location: 3.8, -9.2, 3.7 mm



0 dB = 93.43 = 39.41 dB


Ch661/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 3.9, -9.3, 3.7 mm Diff: 1.31dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

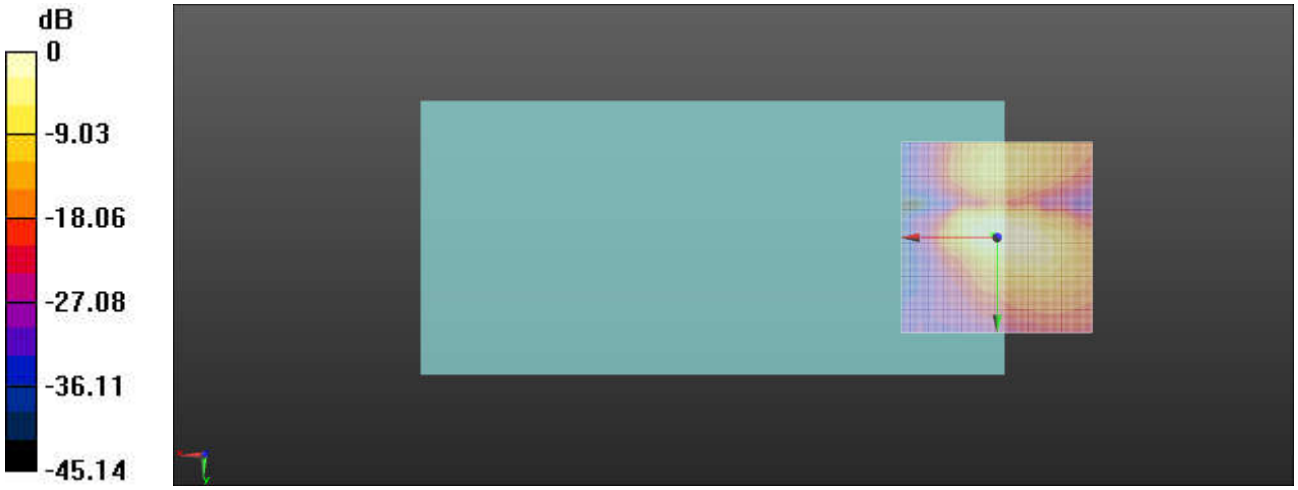
02_HAC T-Coil_GSM1900_Voice_Ch661_Y

Communication System: UID 0, GPRS/EDGE10 (0); Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch661/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 34.48 dB
ABM1 comp = -7.72 dBA/m
Location: 1.3, -0.8, 3.7 mm



0 dB = 52.95 = 34.48 dB

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

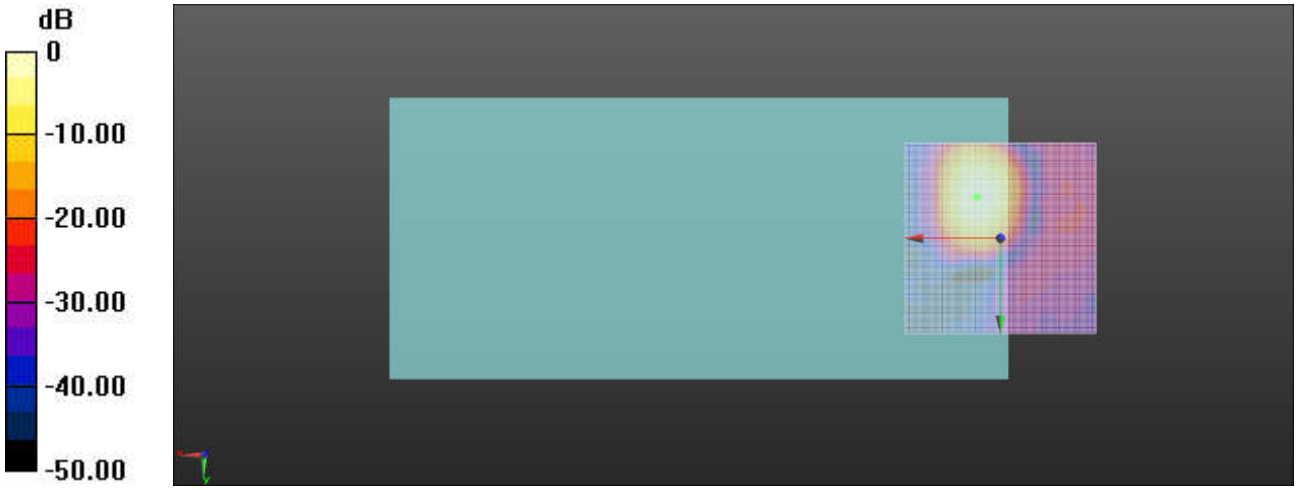
03_HAC T-Coil_WCDMA V_Voice_Ch4182_Z

Communication System: UID 0, UMTS (0); Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

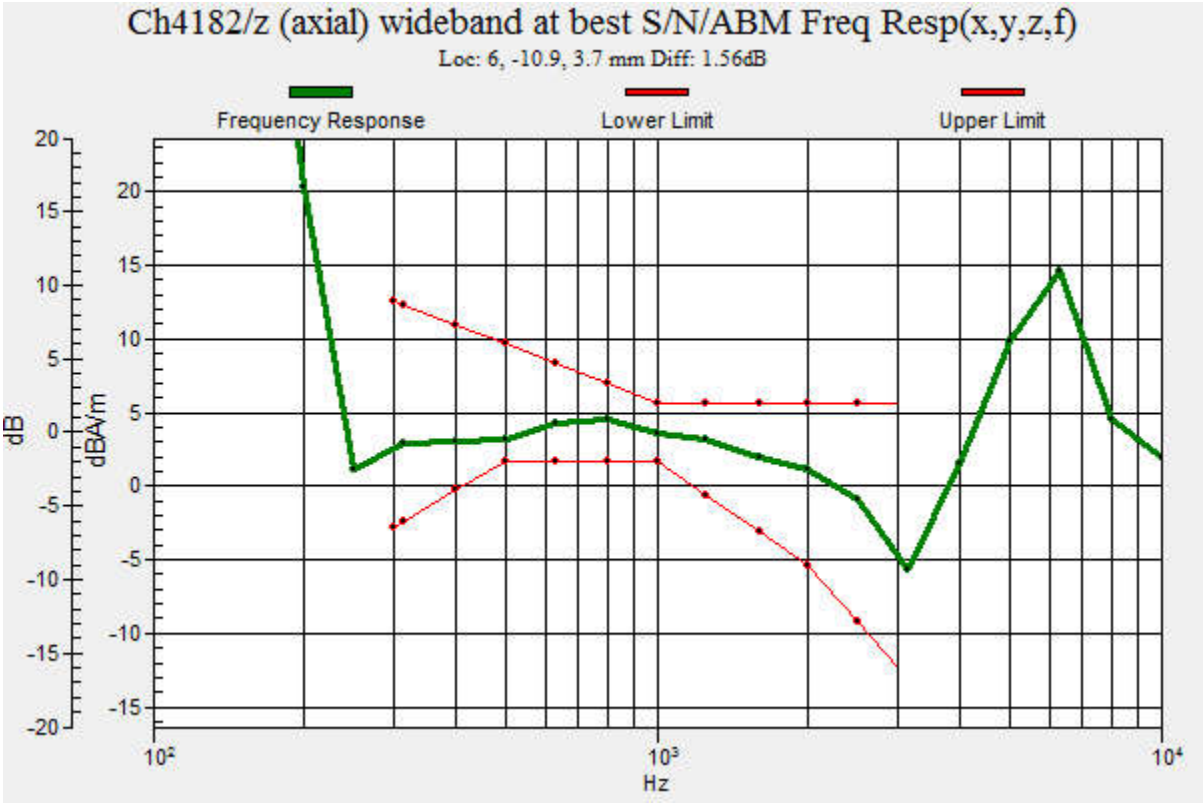
DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch4182/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 45.21 dB
ABM1 comp = 0.56 dBA/m
Location: 6.3, -10.8, 3.7 mm



0 dB = 182.2 = 45.21 dB


Ch4182/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 6, -10.9, 3.7 mm Diff: 1.56dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

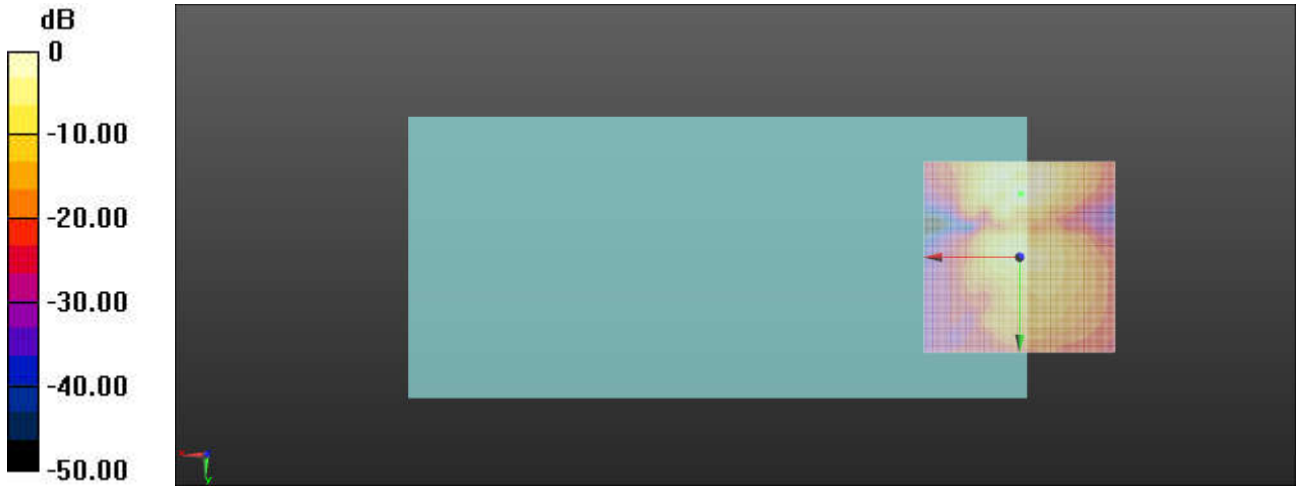
03_HAC T-Coil_WCDMA V_Voice_Ch4182_Y

Communication System: UID 0, UMTS (0); Frequency: 836.4 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch4182/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 41.67 dB
ABM1 comp = -9.61 dBA/m
Location: -0.4, -16.7, 3.7 mm



0 dB = 121.2 = 41.67 dB

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

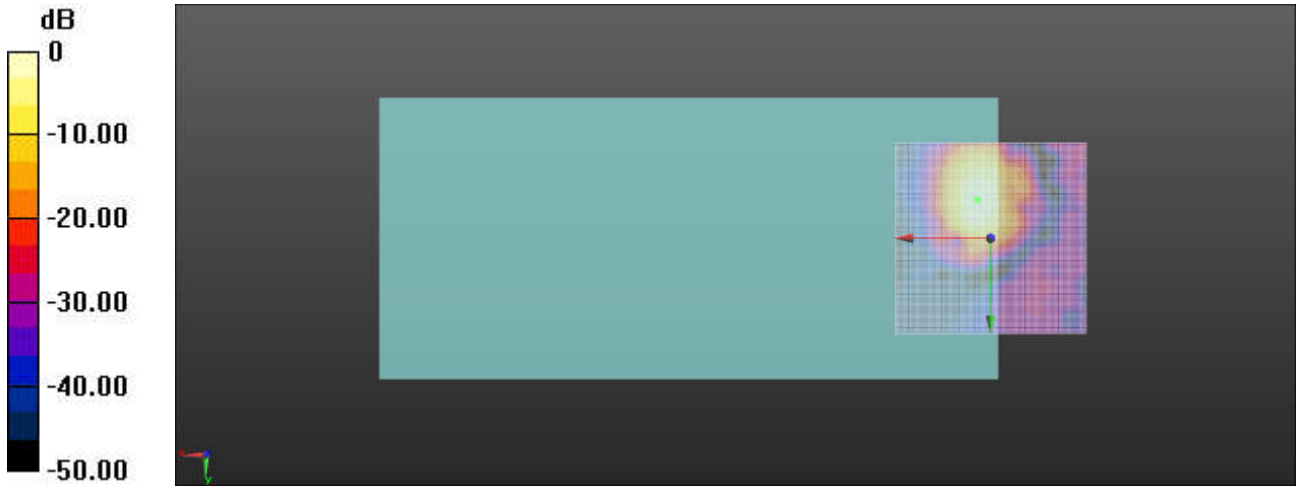
04_HAC T-Coil_WCDMA IV_Voice_Ch1413_Z

Communication System: UID 0, UMTS (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

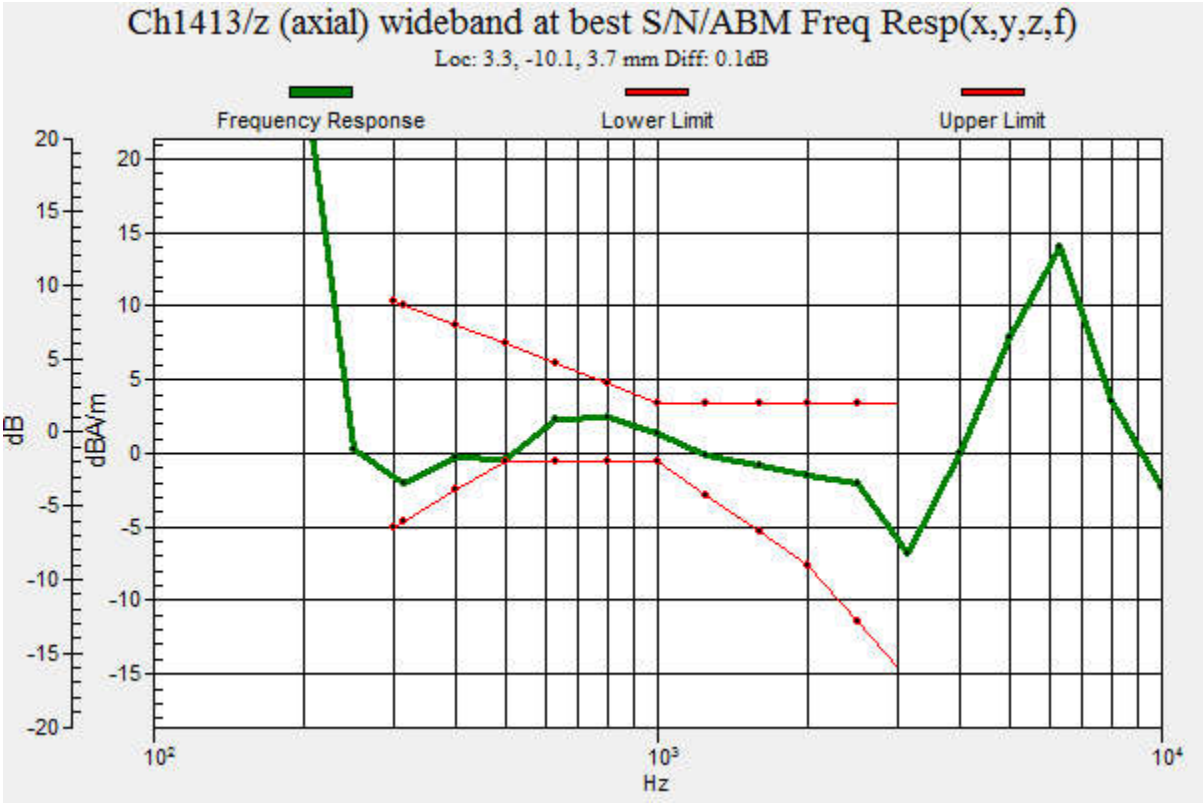
DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch1413/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 46.18 dB
ABM1 comp = 0.94 dBA/m
Location: 3.3, -10, 3.7 mm



0 dB = 203.7 = 46.18 dB


Ch1413/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 3.3, -10.1, 3.7 mm Diff: 0.1dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

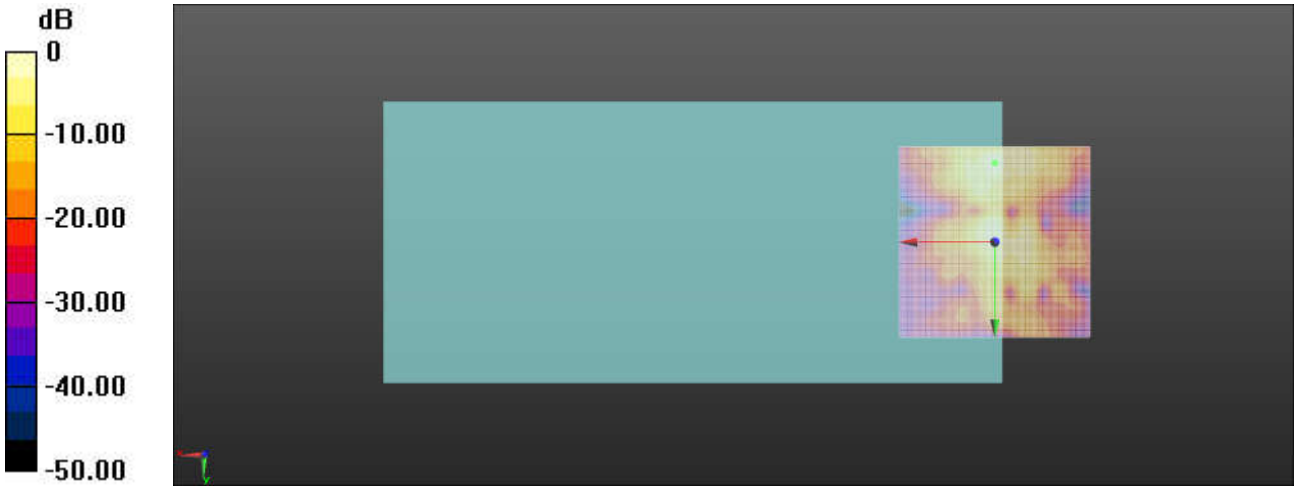
04_HAC T-Coil_WCDMA IV_Voice_Ch1413_Y

Communication System: UID 0, UMTS (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch1413/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 39.08 dB
ABM1 comp = -9.16 dBA/m
Location: 0, -20.8, 3.7 mm



0 dB = 89.95 = 39.08 dB

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

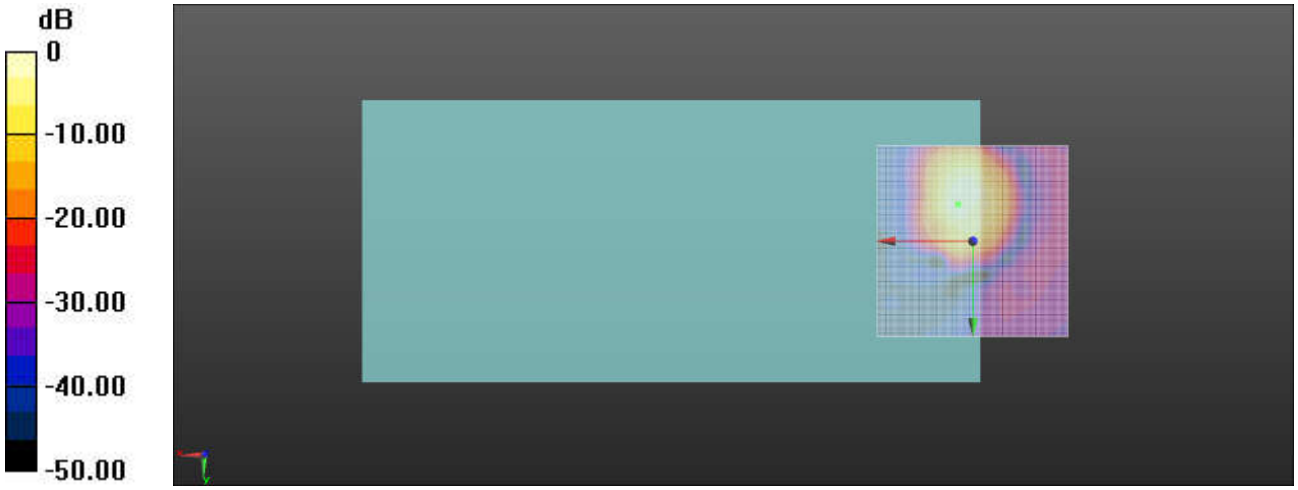
05_HAC T-Coil_WCDMA II_Voice_Ch9400_Z

Communication System: UID 0, UMTS (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

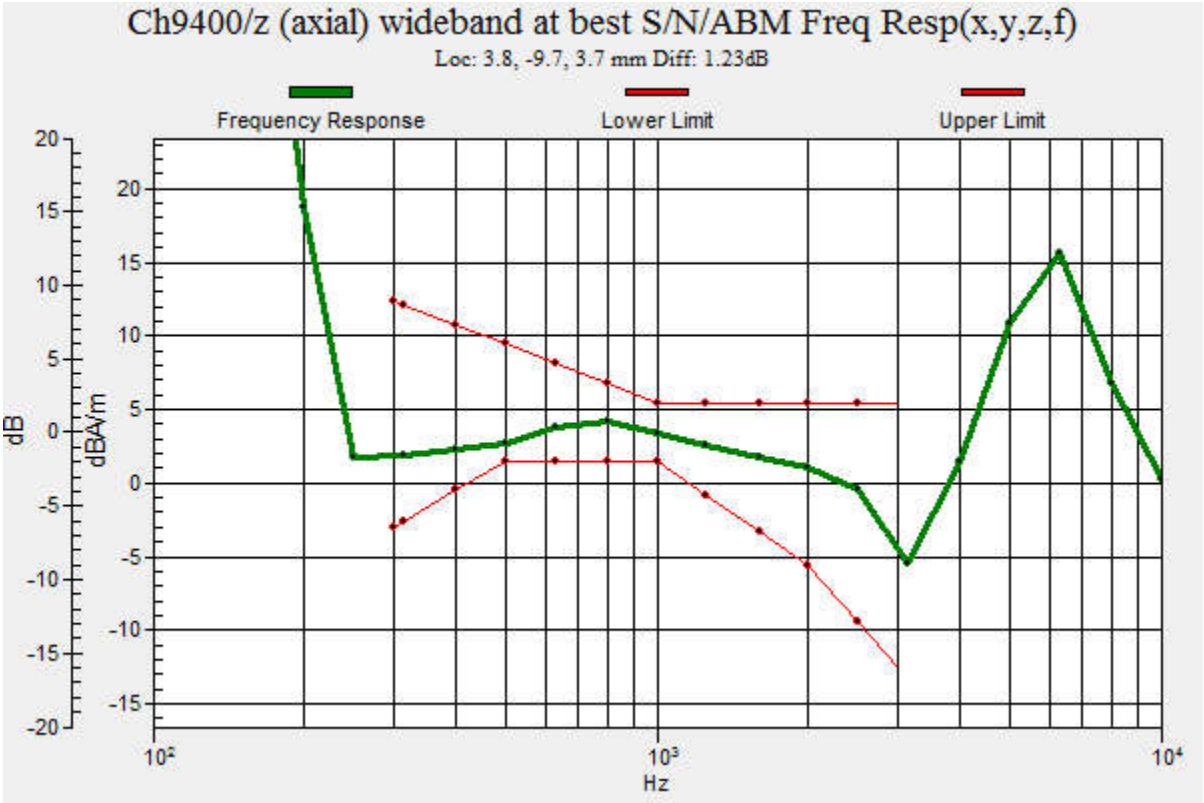
DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch9400/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 47.20 dB
ABM1 comp = 0.87 dBA/m
Location: 3.8, -9.6, 3.7 mm



0 dB = 229.1 = 47.20 dB


Ch9400/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 3.8, -9.7, 3.7 mm Diff: 1.23dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

05_HAC T-Coil_WCDMA II_Voice_Ch9400_Y

Communication System: UID 0, UMTS (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch9400/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 41.25 dB
ABM1 comp = -9.40 dBA/m
Location: 0, -20.8, 3.7 mm

0 dB = 115.5 = 41.25 dB

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

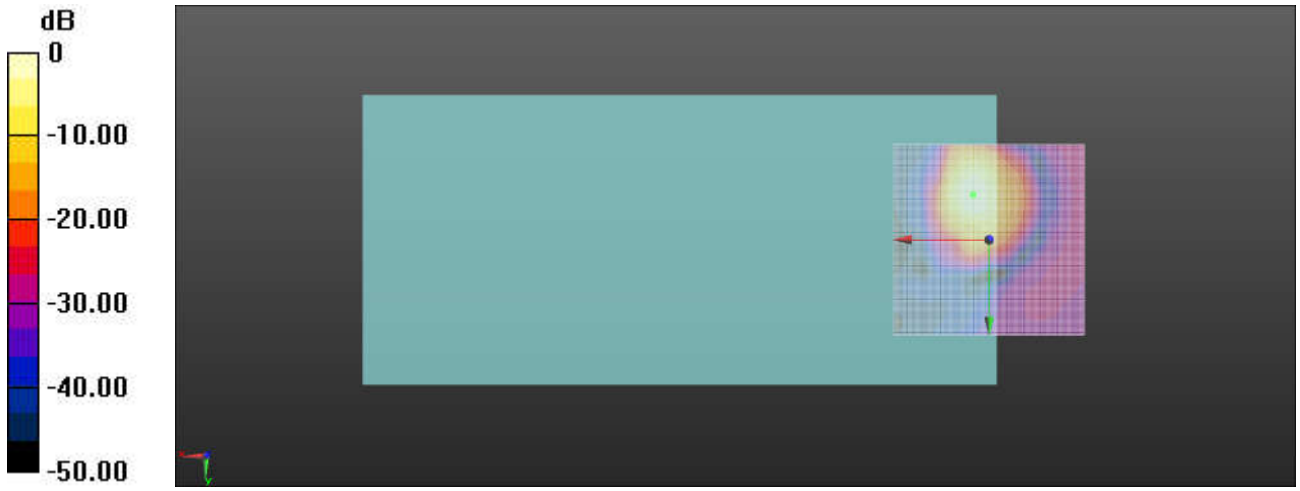
06_HAC T-Coil_LTE Band 7_20M_QPSK_1RB_0Offset_Ch21100_Z

Communication System: UID 0, LTE (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

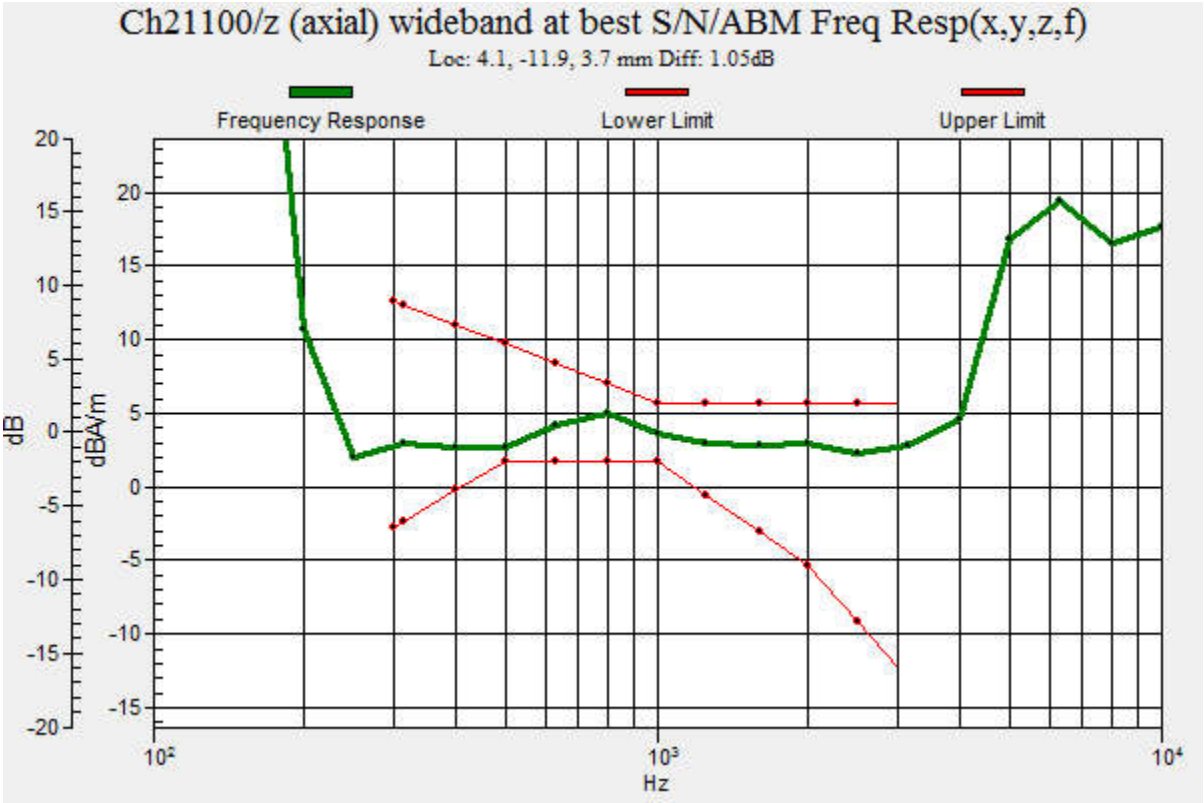
DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch21100/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 43.12 dB
ABM1 comp = 2.11 dBA/m
Location: 4.2, -12.1, 3.7 mm



0 dB = 143.2 = 43.12 dB


Ch21100/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.1, -11.9, 3.7 mm Diff: 1.05dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

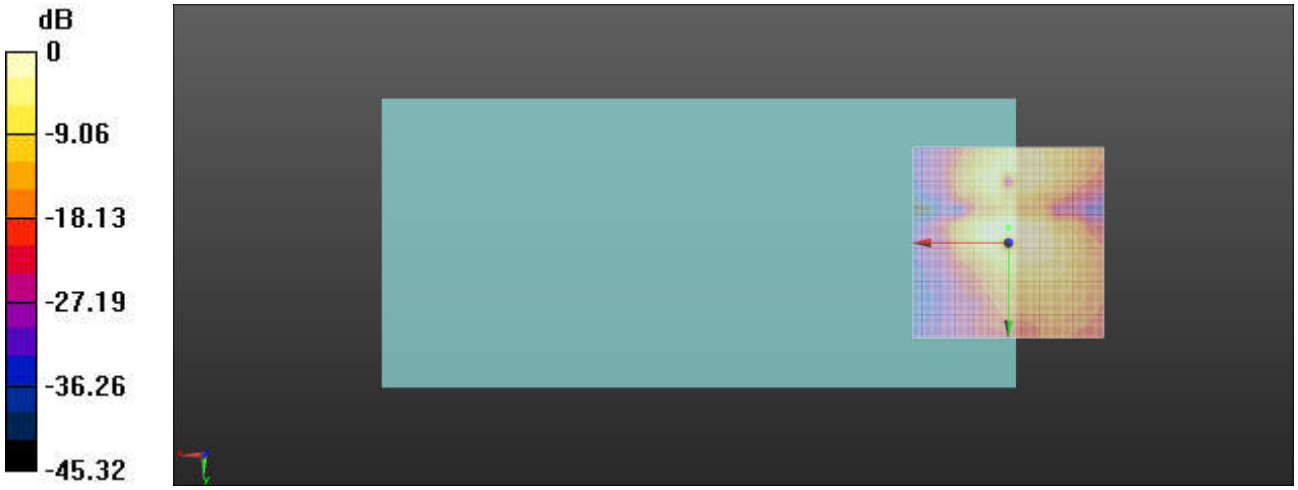
06_HAC T-Coil_LTE Band 7_20M_QPSK_1RB_0Offset_Ch21100_Y

Communication System: UID 0, LTE (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch21100/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 37.54 dB
ABM1 comp = -8.46 dBA/m
Location: 0, -4.2, 3.7 mm



0 dB = 75.37 = 37.54 dB

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

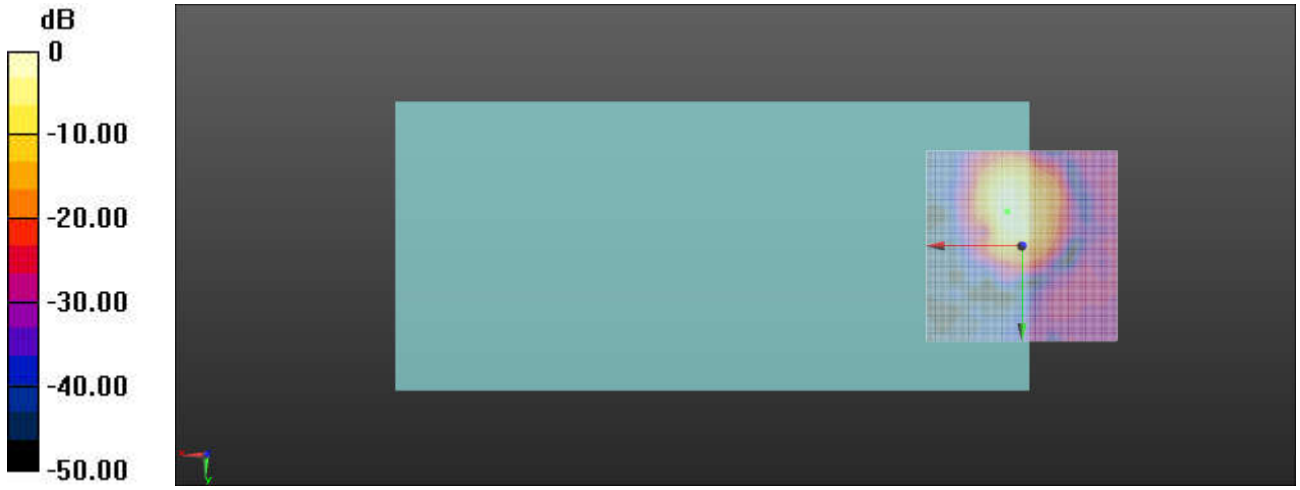
07_HAC T-Coil_LTE Band 12_10M_QPSK_1RB_0Offset_Ch23095_Z

Communication System: UID 0, LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

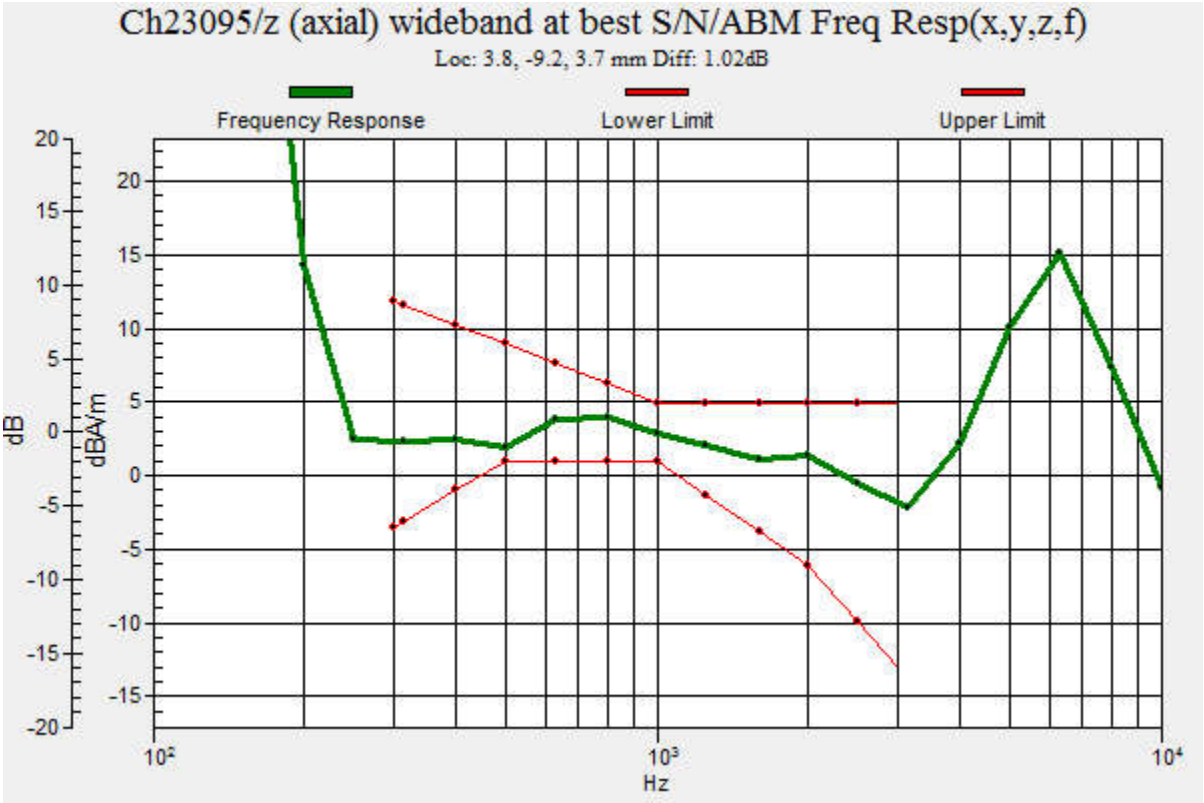
DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch23095/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 42.44 dB
ABM1 comp = -0.51 dBA/m
Location: 3.8, -9.2, 3.7 mm



0 dB = 132.4 = 42.44 dB


Ch23095/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 3.8, -9.2, 3.7 mm Diff: 1.02dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

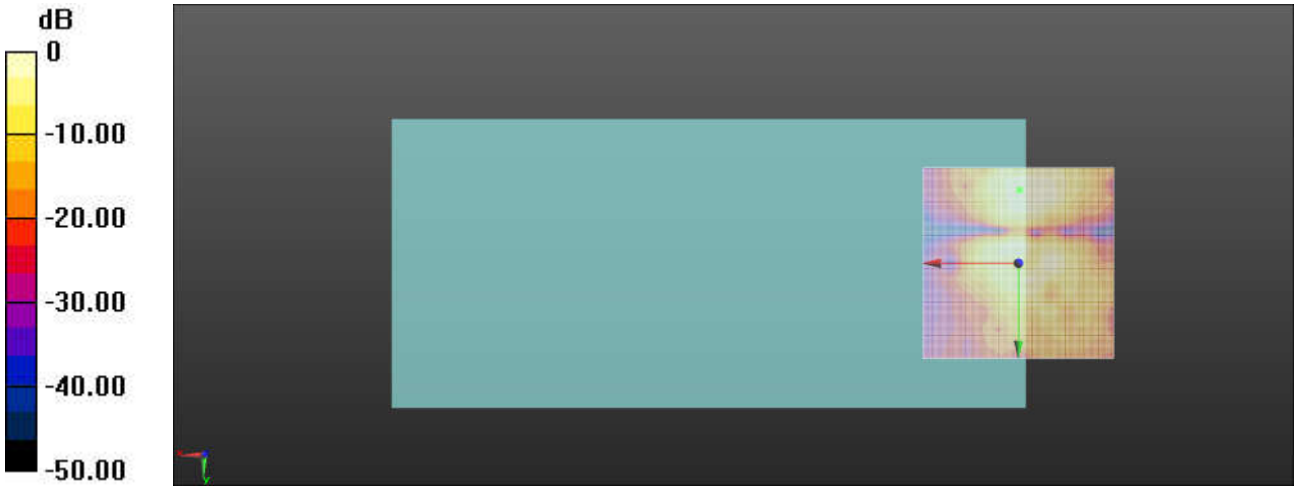
07_HAC T-Coil_LTE Band 12_10M_QPSK_1RB_0Offset_Ch23095_Y

Communication System: UID 0, LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch23095/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 34.65 dB
ABM1 comp = -10.46 dBA/m
Location: -0.4, -19.2, 3.7 mm



0 dB = 54.04 = 34.65 dB

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

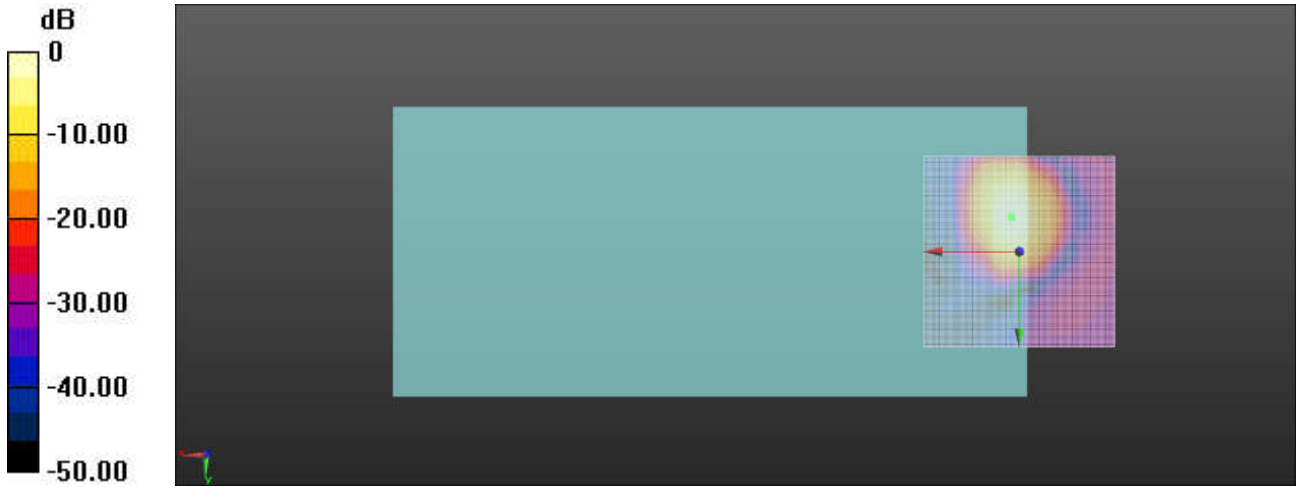
08_HAC T-Coil_LTE Band 13_10M_QPSK_1RB_0Offset_Ch23230_Z

Communication System: UID 0, LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

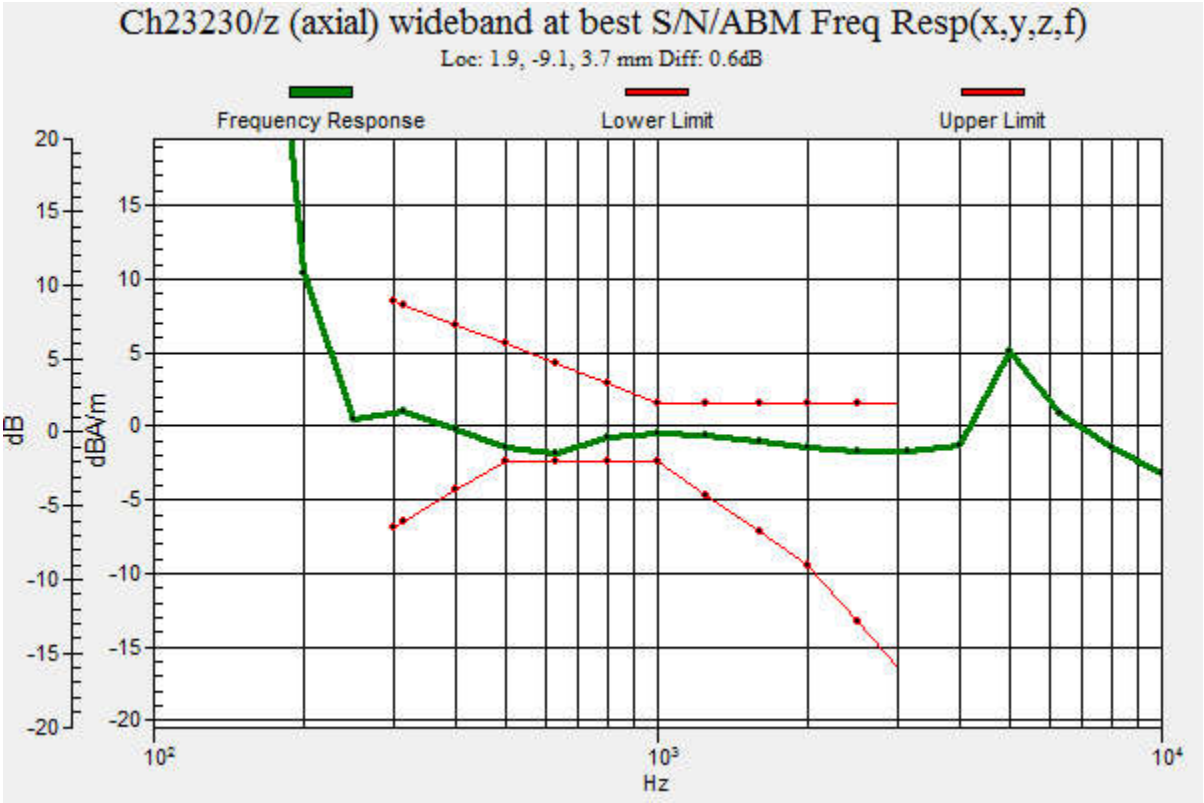
DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch23230/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 43.66 dB
ABM1 comp = -0.86 dBA/m
Location: 2.1, -9.2, 3.7 mm



0 dB = 152.4 = 43.66 dB


Ch23230/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 1.9, -9.1, 3.7 mm Diff: 0.6dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

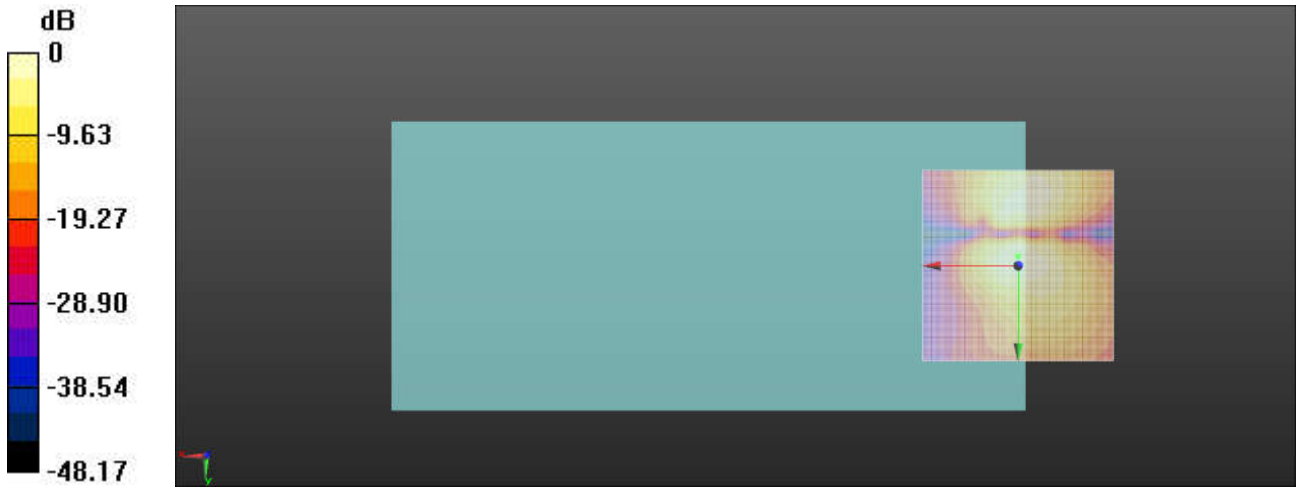
08_HAC T-Coil_LTE Band 13_10M_QPSK_1RB_0Offset_Ch23230_Y

Communication System: UID 0, LTE (0); Frequency: 782 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch23230/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 36.17 dB
ABM1 comp = -9.71 dBA/m
Location: 0, -2.5, 3.7 mm



0 dB = 64.31 = 36.17 dB

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

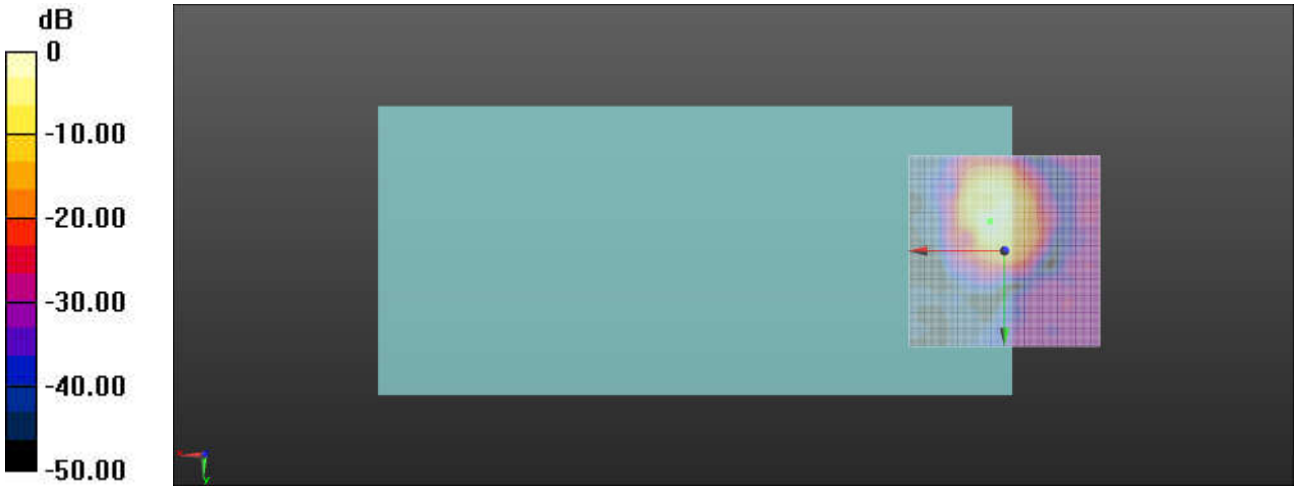
09_HAC T-Coil_LTE Band 25_20M_QPSK_1RB_0Offset_Ch26340_Z

Communication System: UID 0, LTE (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

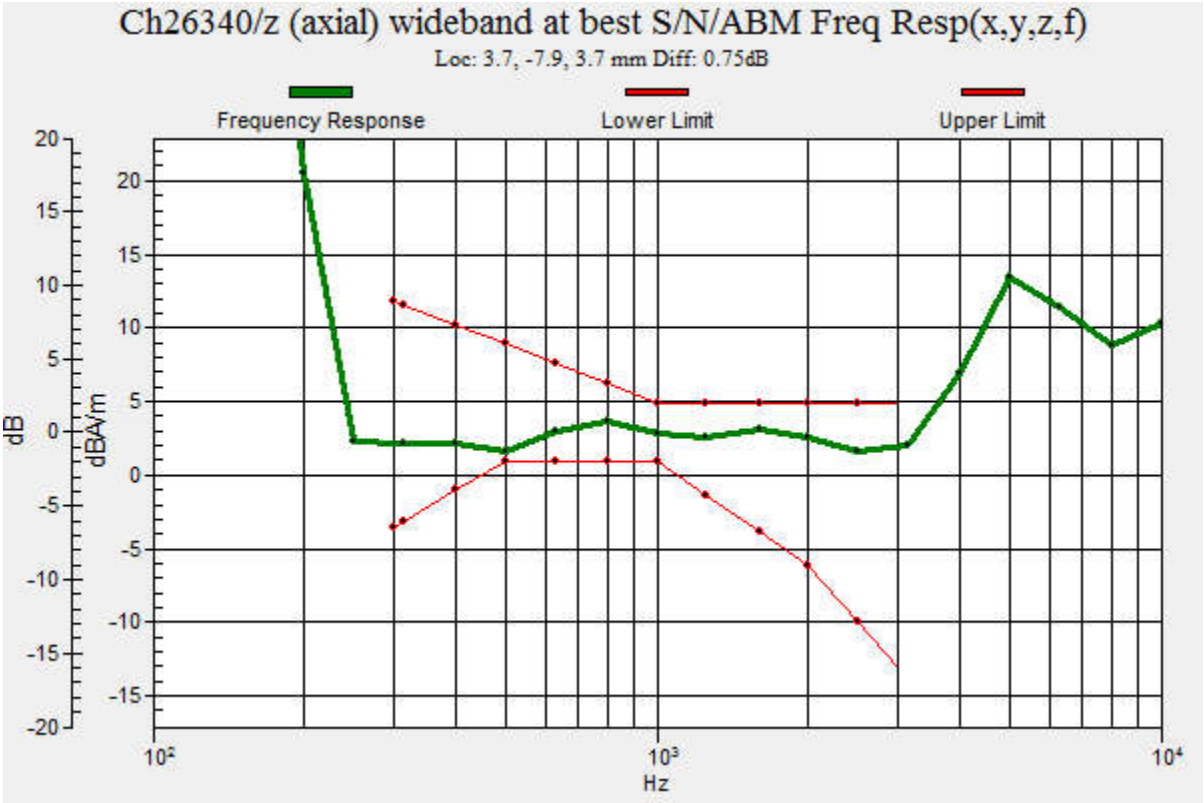
DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch26340/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 42.81 dB
ABM1 comp = -0.85 dBA/m
Location: 3.8, -7.9, 3.7 mm



0 dB = 138.2 = 42.81 dB


Ch26340/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 3.7, -7.9, 3.7 mm Diff: 0.75dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

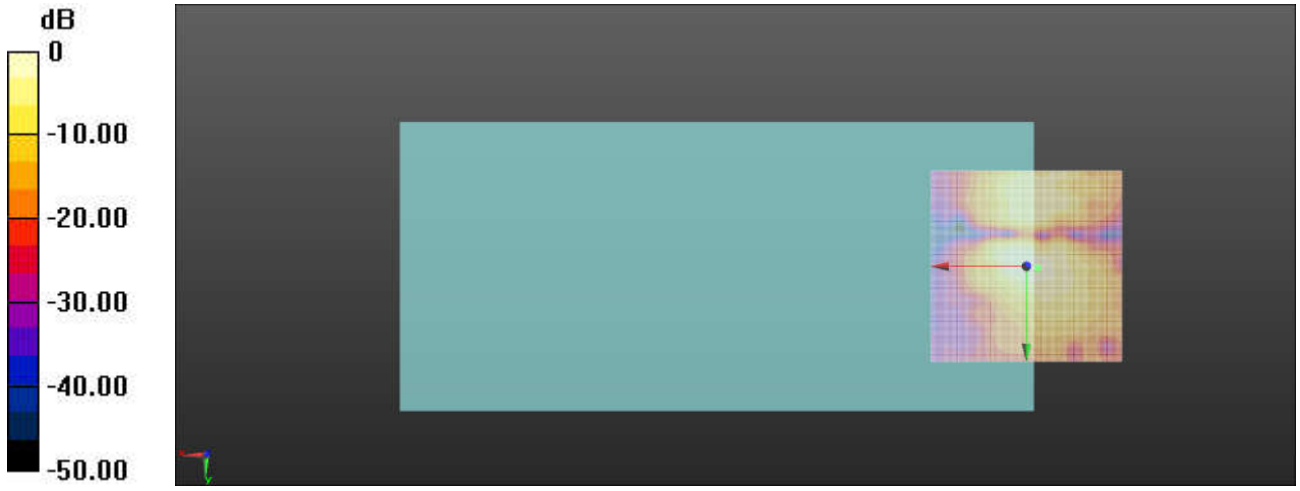
09_HAC T-Coil_LTE Band 25_20M_QPSK_1RB_0Offset_Ch26340_Y

Communication System: UID 0, LTE (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch26340/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 34.96 dB
ABM1 comp = -12.27 dBA/m
Location: -2.9, 0.4, 3.7 mm



0 dB = 55.97 = 34.96 dB

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

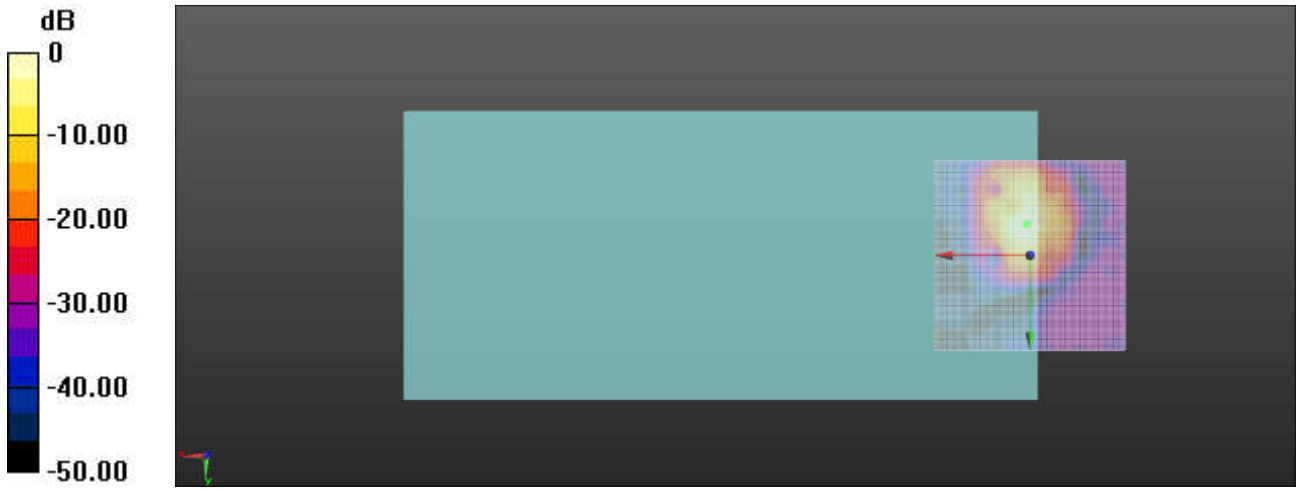
10_HAC T-Coil_LTE Band 26_15M_QPSK_1RB_0Offset_Ch26865_Z

Communication System: UID 0, LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

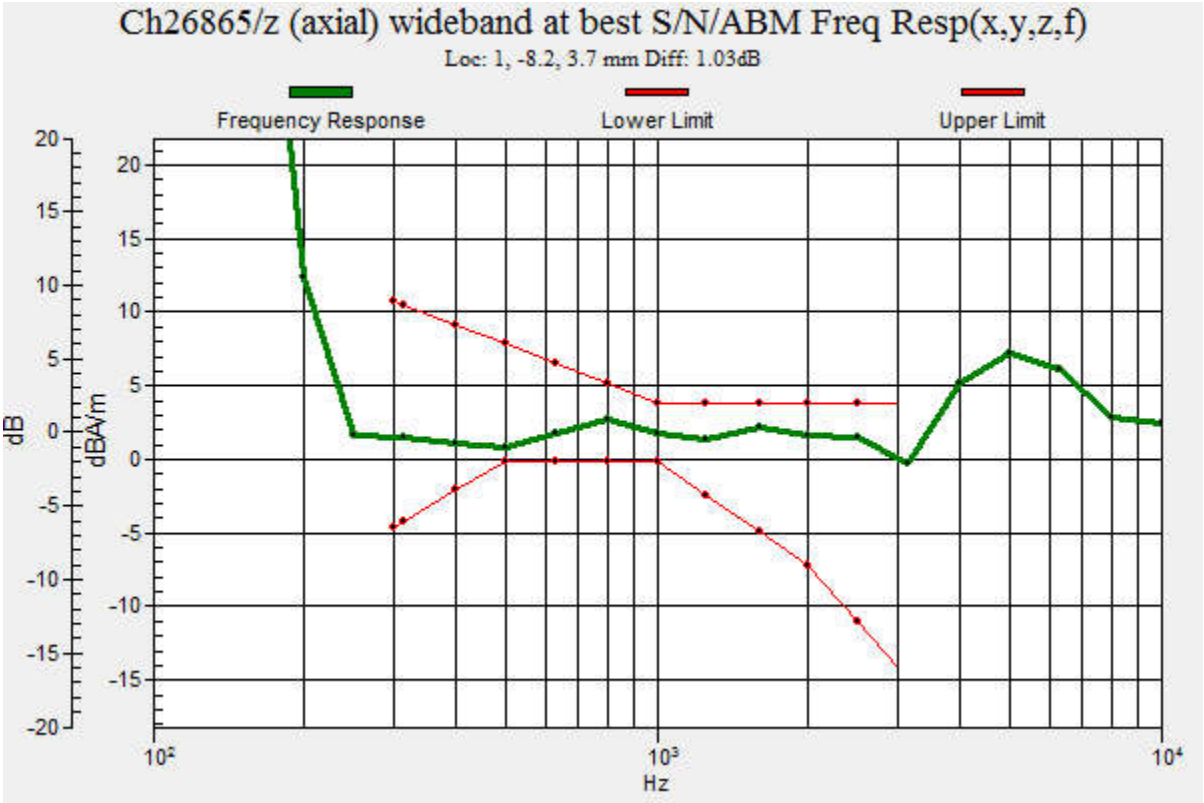
DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch26865/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 44.92 dB
ABM1 comp = -1.42 dBA/m
Location: 0.8, -8.3, 3.7 mm



0 dB = 176.2 = 44.92 dB


Ch26865/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 1, -8.2, 3.7 mm Diff: 1.03dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

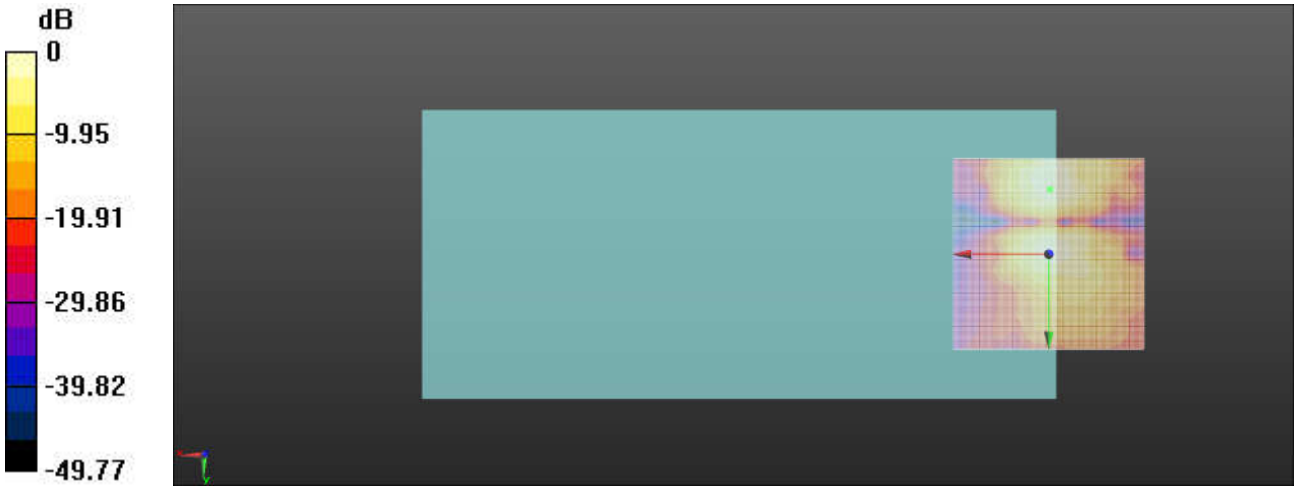
10_HAC T-Coil_LTE Band 26_15M_QPSK_1RB_0Offset_Ch26865_Y

Communication System: UID 0, LTE (0); Frequency: 831.5 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch26865/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 37.01 dB
ABM1 comp = -9.10 dBA/m
Location: -0.4, -17.1, 3.7 mm



0 dB = 70.91 = 37.01 dB

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

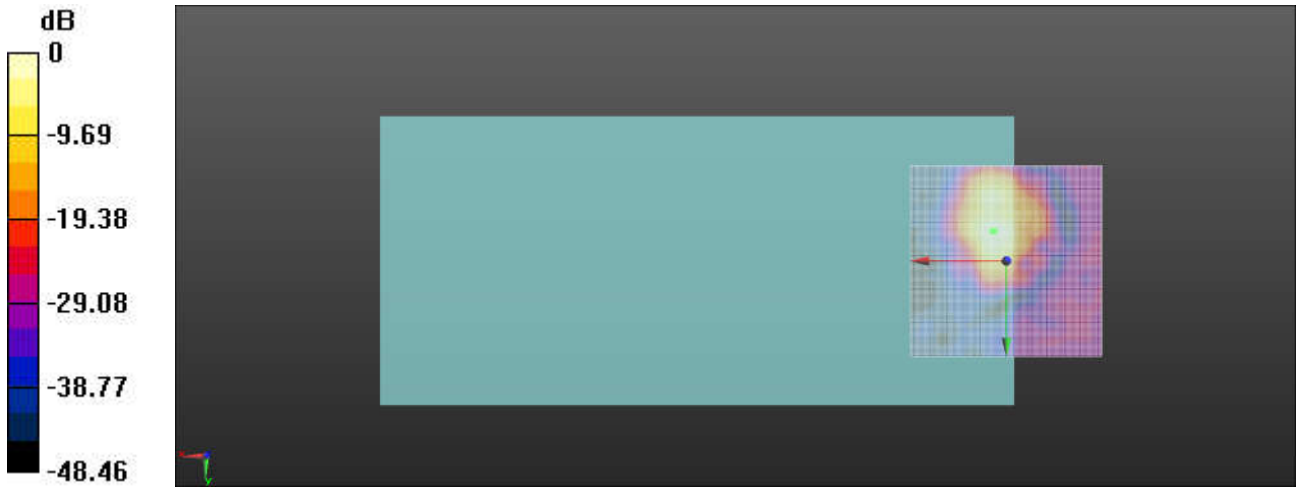
11_HAC T-Coil_LTE Band 66_20M_QPSK_1RB_0Offset_Ch132322_Z

Communication System: UID 0, LTE (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

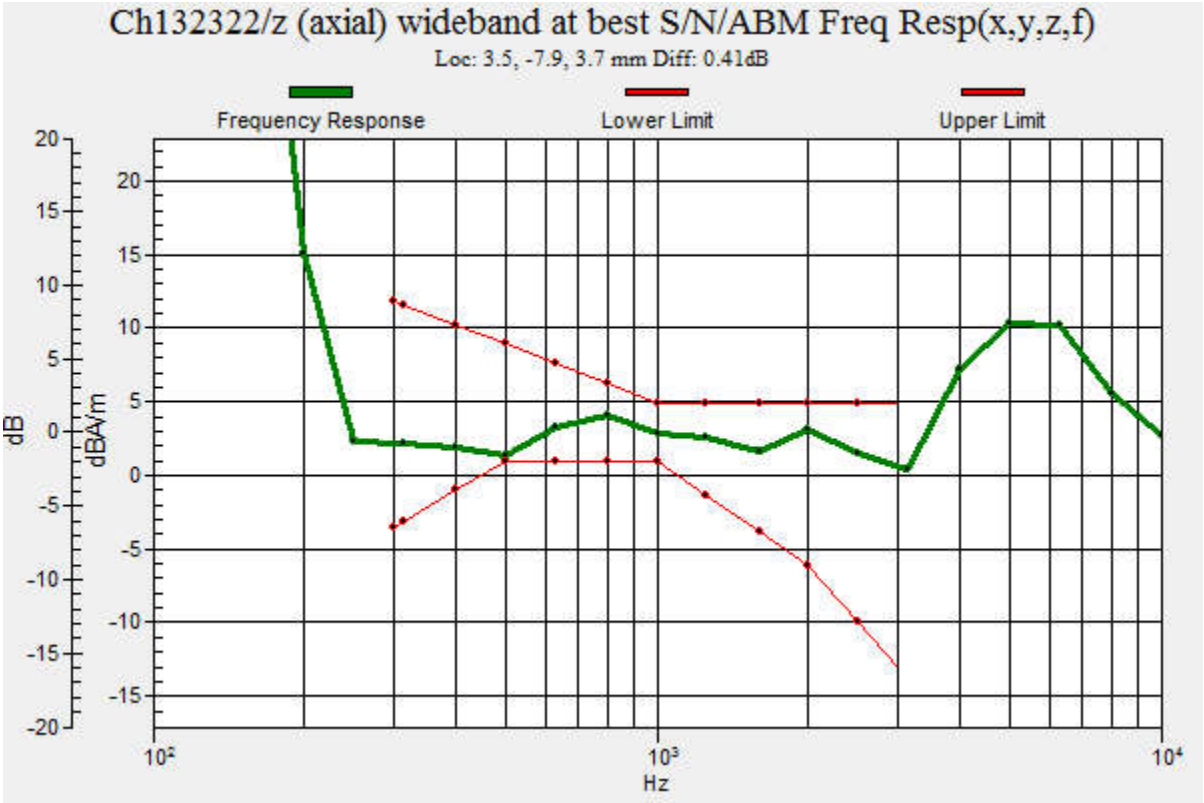
DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch132322/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 40.12 dB
ABM1 comp = -1.52 dBA/m
Location: 3.3, -7.9, 3.7 mm



0 dB = 101.4 = 40.12 dB


Ch132322/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 3.5, -7.9, 3.7 mm Diff: 0.41dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
10²
10³
10⁴

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

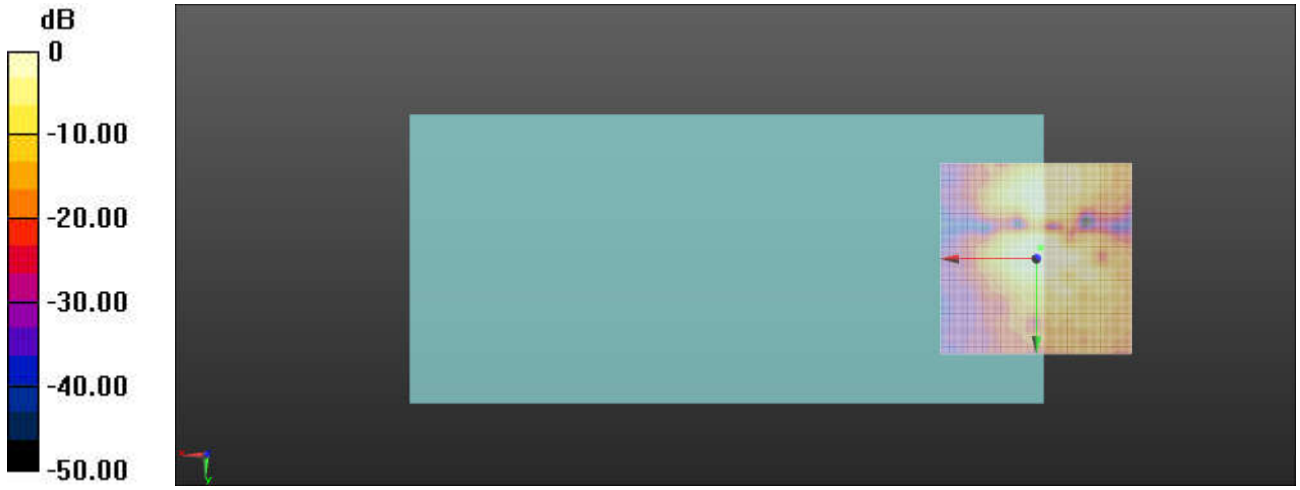
11_HAC T-Coil_LTE Band 66_20M_QPSK_1RB_0Offset_Ch132322_Y

Communication System: UID 0, LTE (0); Frequency: 1745 MHz;Duty Cycle: 1:1
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch132322/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 33.19 dB
ABM1 comp = -11.99 dBA/m
Location: -1.2, -2.9, 3.7 mm



0 dB = 45.65 = 33.19 dB

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

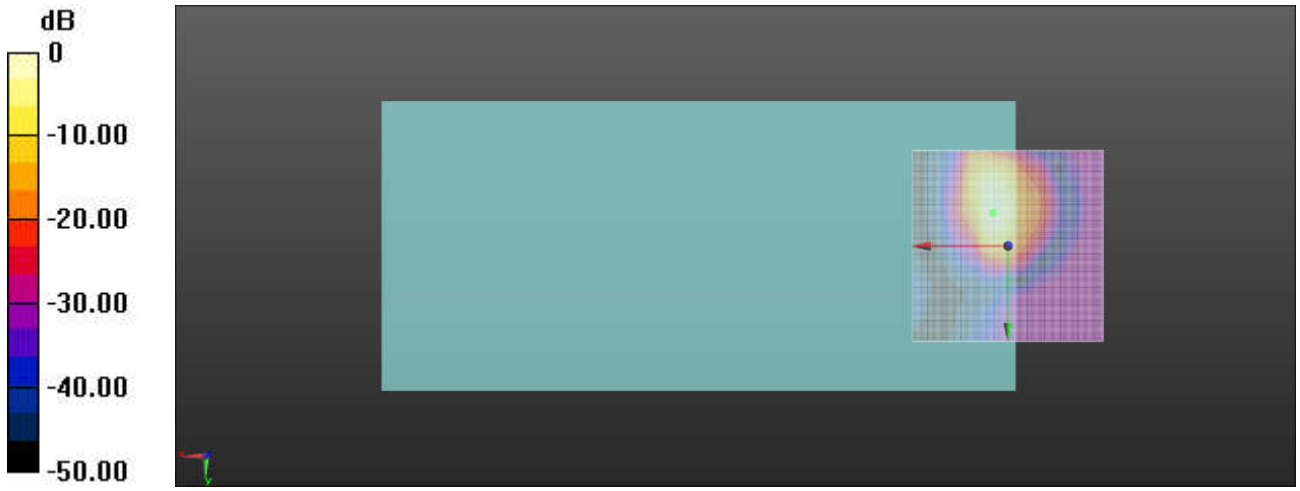
12_HAC T-Coil_LTE Band 41_20M_QPSK_1RB_0Offset_Ch40620_Z

Communication System: UID 0, LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1.59
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

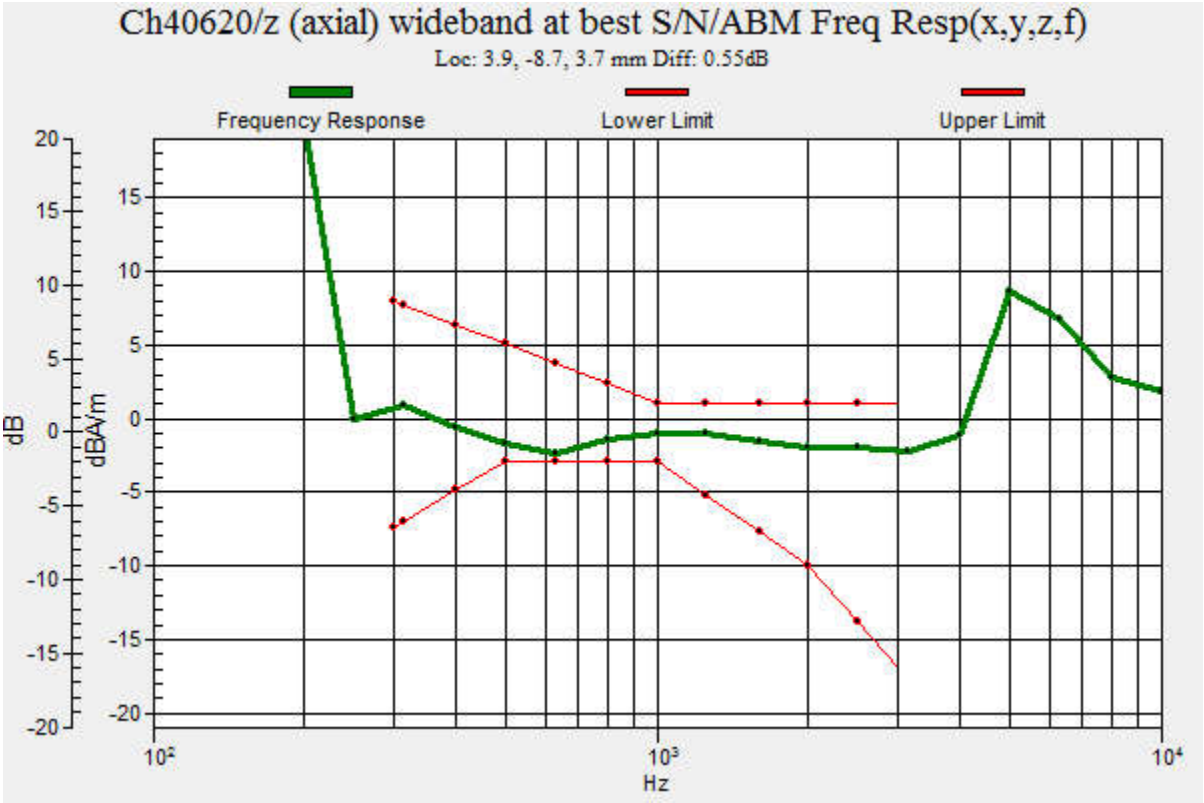
DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch40620/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 35.86 dB
ABM1 comp = -1.24 dBA/m
Location: 3.8, -8.8, 3.7 mm



0 dB = 62.08 = 35.86 dB


Ch40620/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 3.9, -8.7, 3.7 mm Diff: 0.55dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

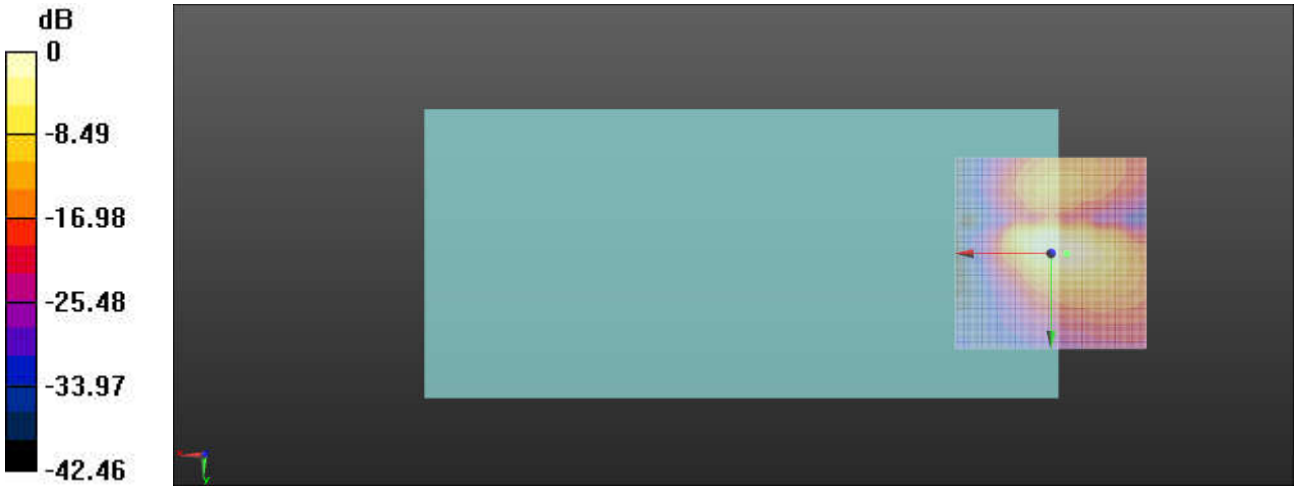
12_HAC T-Coil_LTE Band 41_20M_QPSK_1RB_0Offset_Ch40620_Y

Communication System: UID 0, LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1.59
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch40620/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 32.64 dB
ABM1 comp = -15.09 dBA/m
Location: -4.2, 0, 3.7 mm



0 dB = 42.87 = 32.64 dB

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

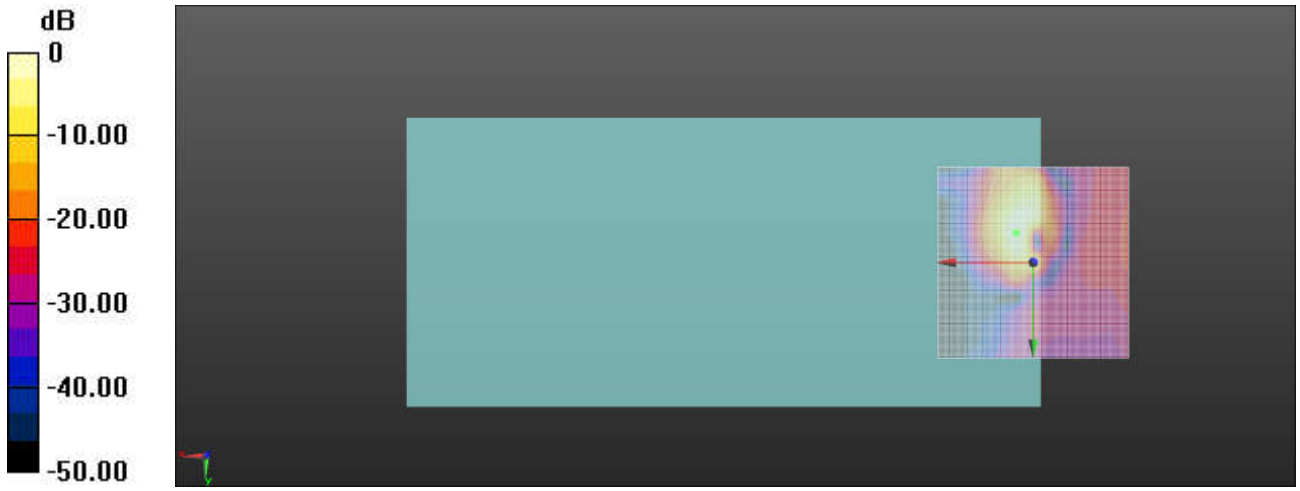
13_HAC T-Coil_LTE Band 42_20M_QPSK_1RB_0Offset_Ch42590_Z

Communication System: UID 0, LTE (0); Frequency: 3500 MHz;Duty Cycle: 1:1.59
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

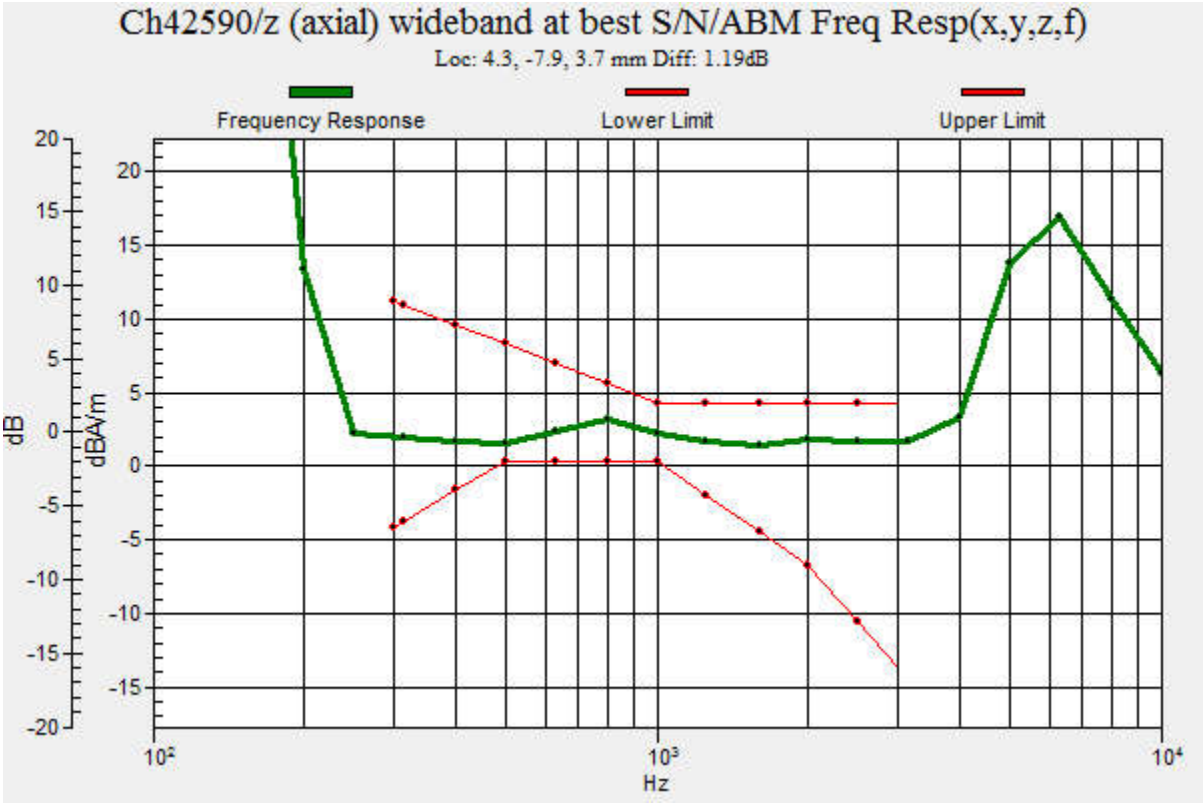
DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch42590/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 38.01 dB
ABM1 comp = 1.07 dBA/m
Location: 4.6, -7.9, 3.7 mm



0 dB = 79.51 = 38.01 dB


Ch42590/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.3, -7.9, 3.7 mm Diff: 1.19dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

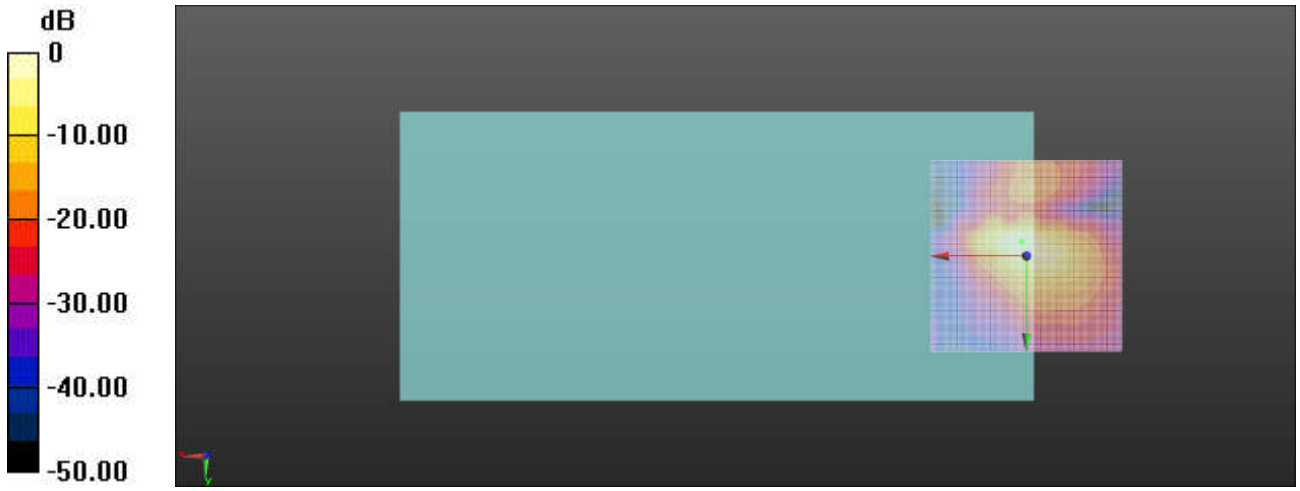
13_HAC T-Coil_LTE Band 42_20M_QPSK_1RB_0Offset_Ch42590_Y

Communication System: UID 0, LTE (0); Frequency: 3500 MHz;Duty Cycle: 1:1.59
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch42590/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 38.12 dB
ABM1 comp = -8.15 dBA/m
Location: 1.3, -3.8, 3.7 mm



0 dB = 80.57 = 38.12 dB

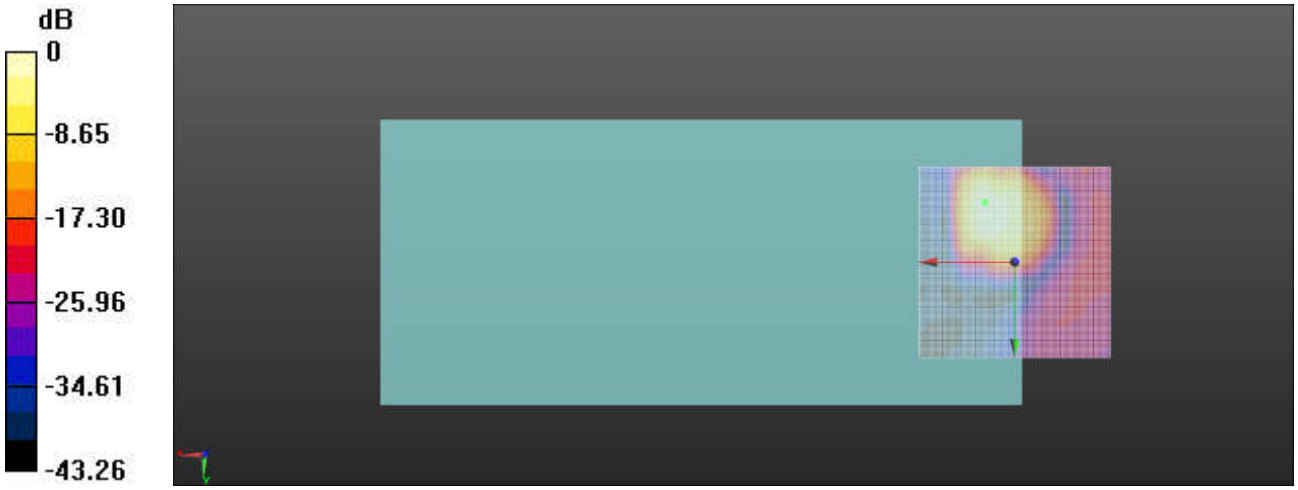
Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

14_HAC T-Coil_WLAN 2.4GHz_802.11b 1Mbps_Ch6_Z

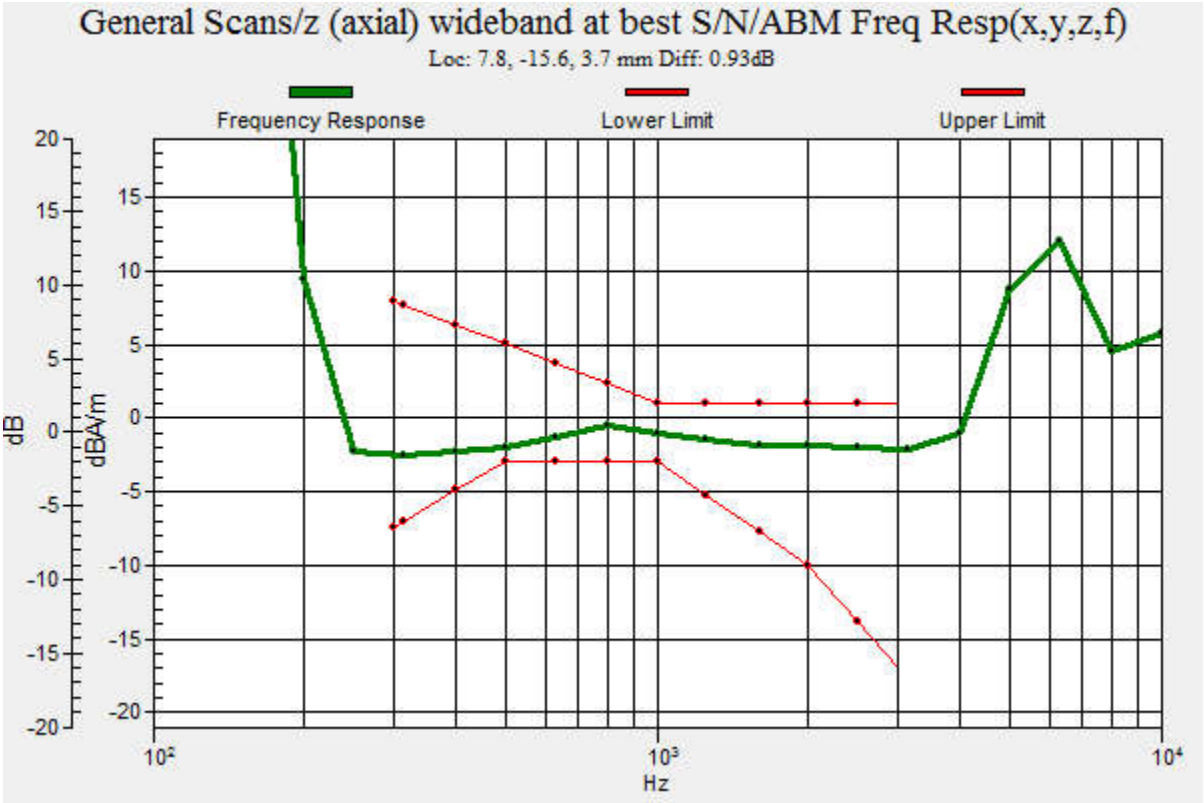
Communication System: UID 0, WIFI (0); Frequency: 2437 MHz;Duty Cycle: 1:1.007
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch6/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 36.36 dB
ABM1 comp = -3.08 dBA/m
Location: 7.9, -15.8, 3.7 mm



0 dB = 65.78 = 36.36 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 7.8, -15.6, 3.7 mm Diff: 0.93dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

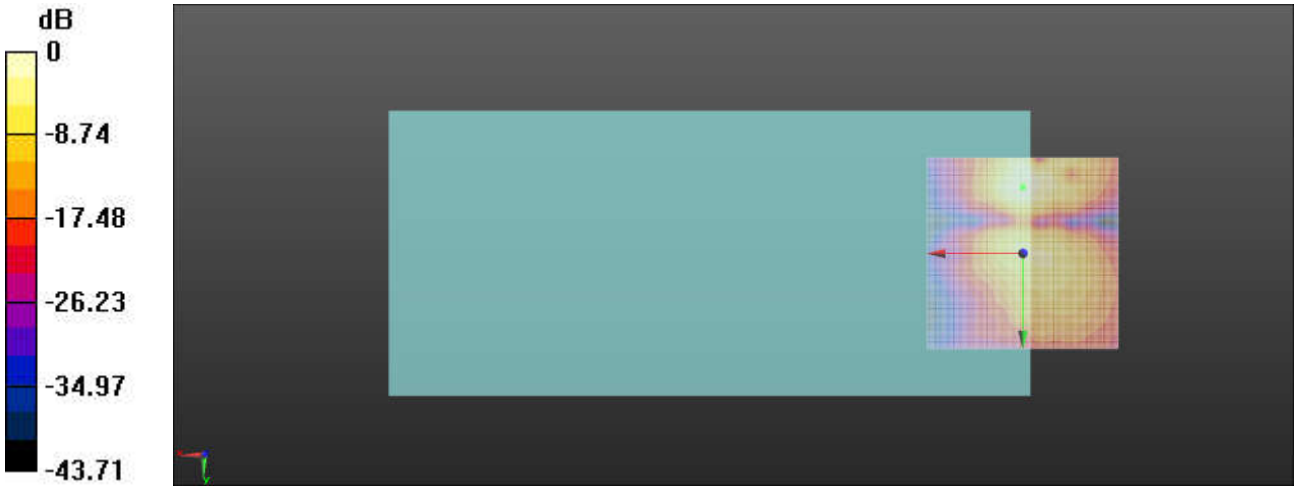
14_HAC T-Coil_WLAN 2.4GHz_802.11b 1Mbps_Ch6_Y

Communication System: UID 0, WIFI (0); Frequency: 2437 MHz;Duty Cycle: 1:1.007
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch6/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 37.64 dB
ABM1 comp = -10.43 dBA/m
Location: 0, -17.5, 3.7 mm



0 dB = 76.23 = 37.64 dB

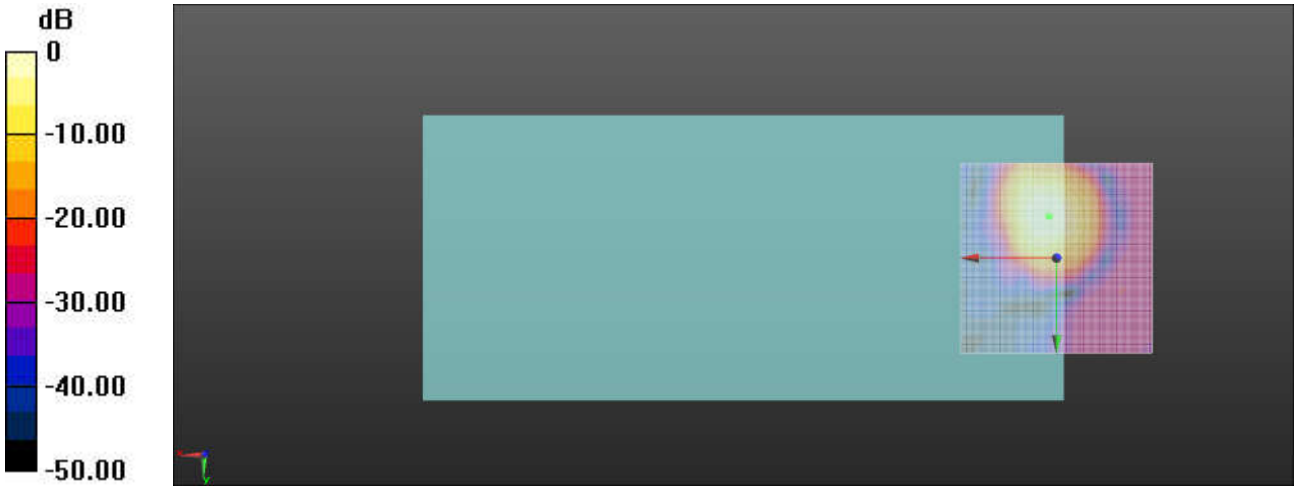
Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

15_HAC T-Coil_WLAN5GHz_802.11ac-VHT20 MCS0_Ch40_Z

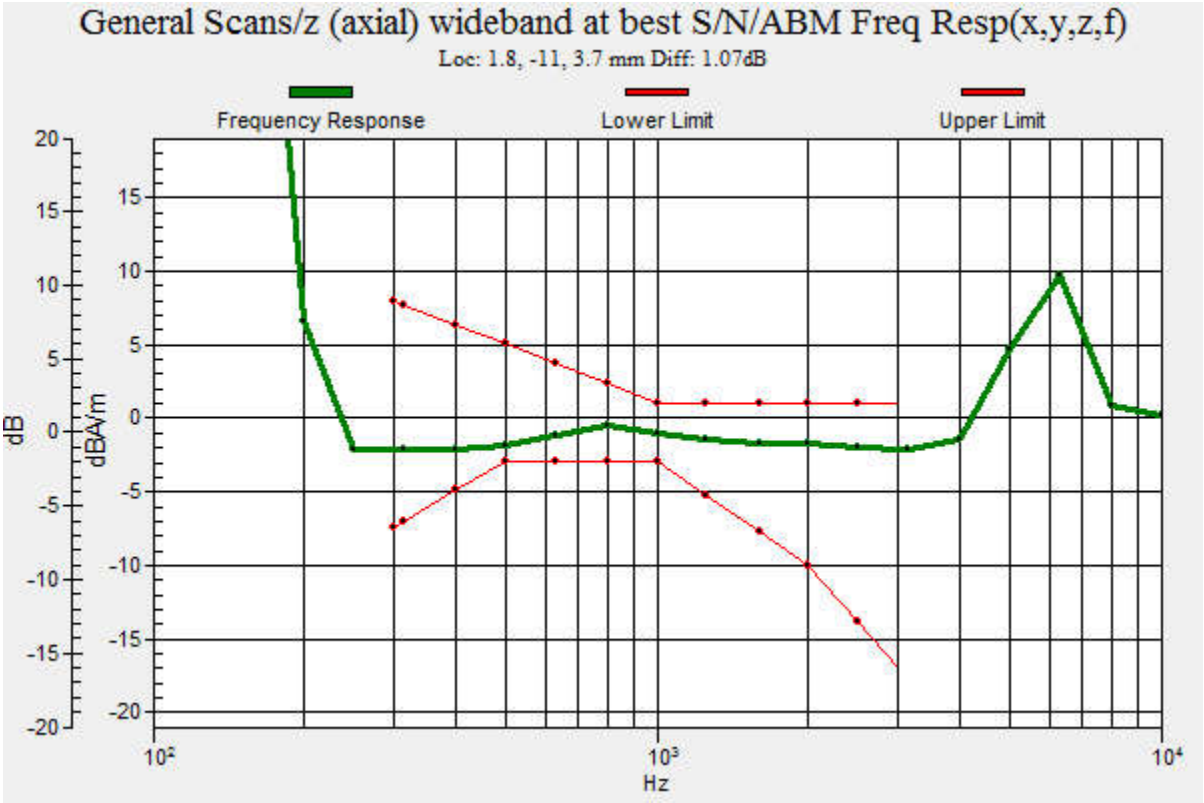
Communication System: UID 0, WIFI (0); Frequency: 5200 MHz;Duty Cycle: 1:1.018
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch40/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 41.81 dB
ABM1 comp = -1.74 dBA/m
Location: 2.1, -10.8, 3.7 mm



0 dB = 123.1 = 41.81 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 1.8, -11, 3.7 mm Diff: 1.07dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

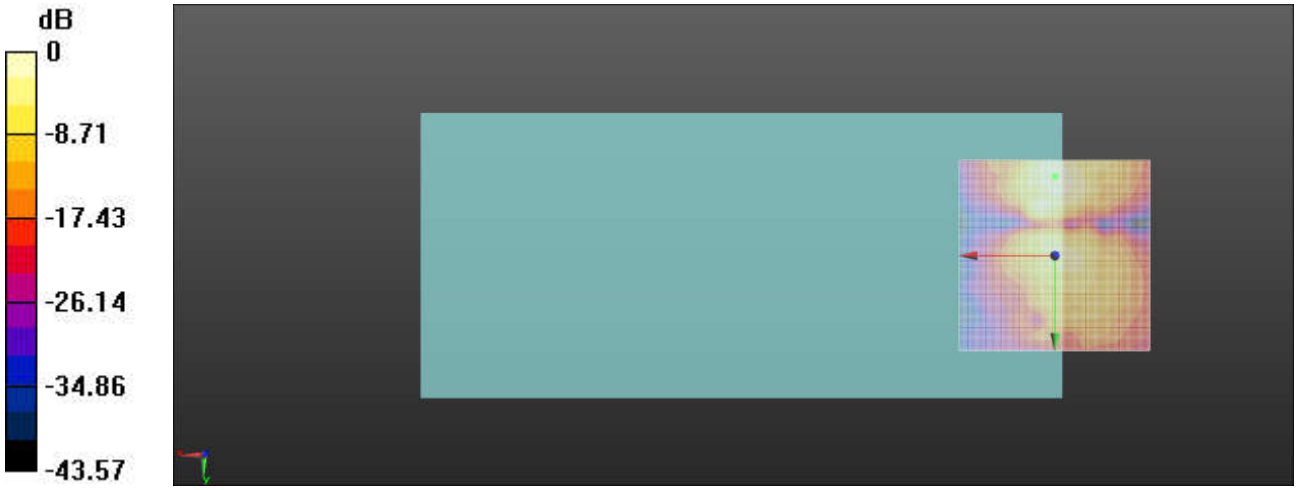
15_HAC T-Coil_WLAN5GHz_802.11ac-VHT20 MCS0_Ch40_Y

Communication System: UID 0, WIFI (0); Frequency: 5200 MHz;Duty Cycle: 1:1.018
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch40/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 38.24 dB
ABM1 comp = -10.97 dBA/m
Location: 0, -20.8, 3.7 mm



0 dB = 81.66 = 38.24 dB

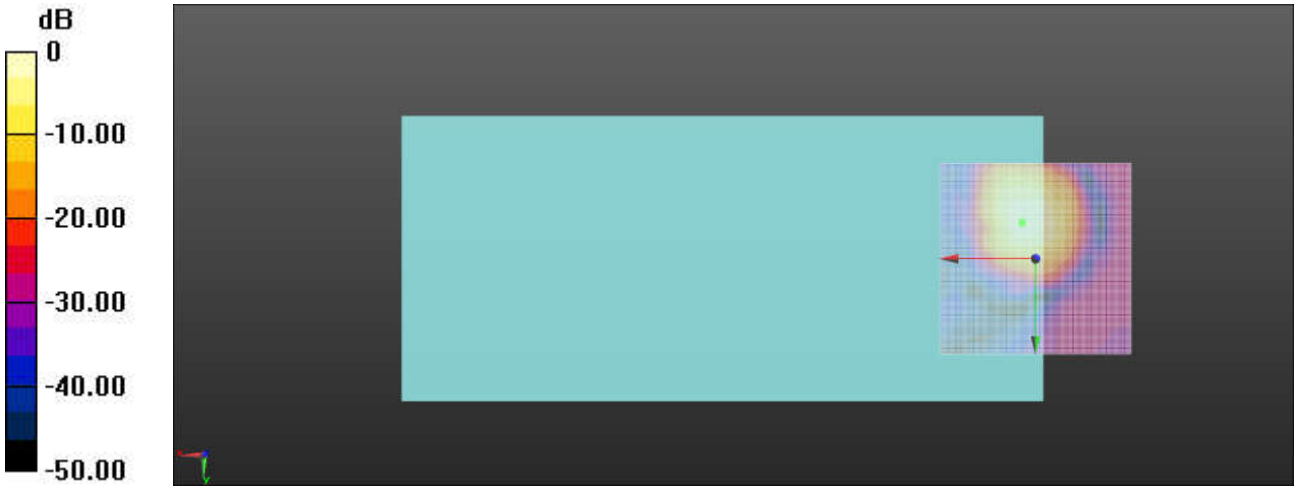
Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

16_HAC T-Coil_WLAN5GHz_802.11ac-VHT20 MCS0_Ch56_Z

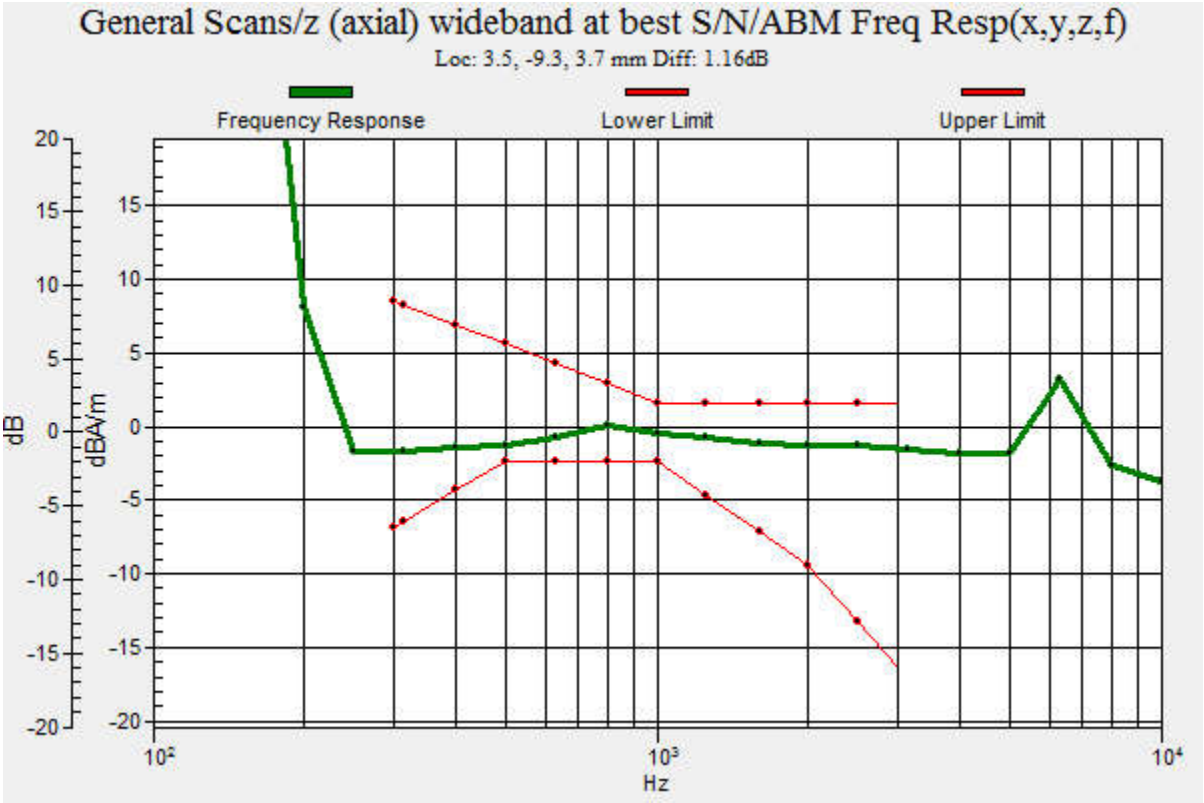
Communication System: UID 0, WIFI (0); Frequency: 5280 MHz;Duty Cycle: 1:1.018
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch56/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 42.69 dB
ABM1 comp = -1.38 dBA/m
Location: 3.3, -9.6, 3.7 mm



0 dB = 136.3 = 42.69 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 3.5, -9.3, 3.7 mm Diff: 1.16dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

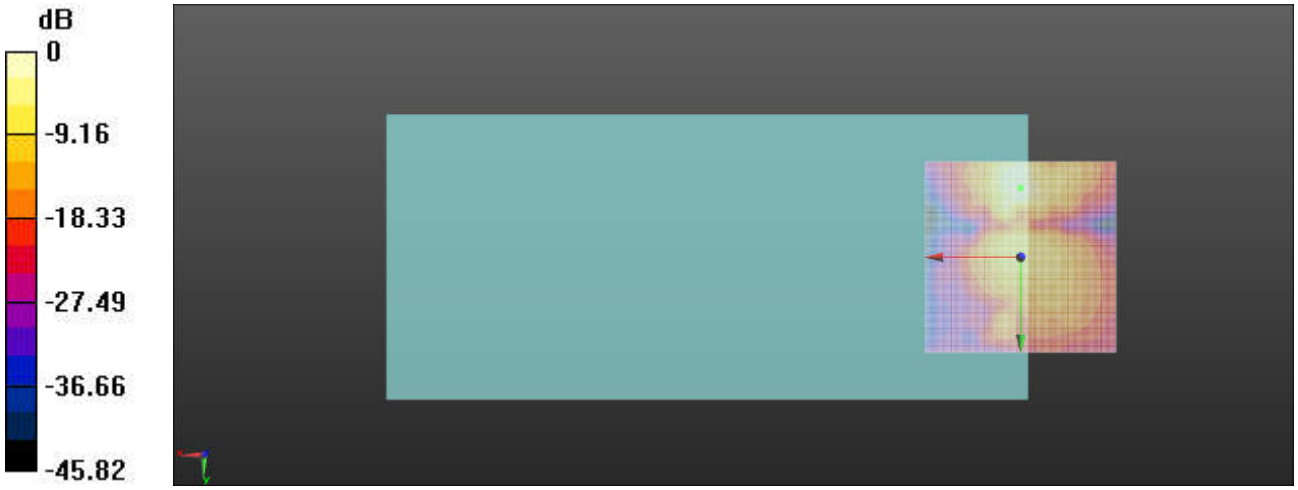
16_HAC T-Coil_WLAN5GHz_802.11ac-VHT20 MCS0_Ch56_Y

Communication System: UID 0, WIFI (0); Frequency: 5280 MHz;Duty Cycle: 1:1.018
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch56/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 40.84 dB
ABM1 comp = -10.34 dBA/m
Location: 0, -18.3, 3.7 mm



0 dB = 110.1 = 40.84 dB

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

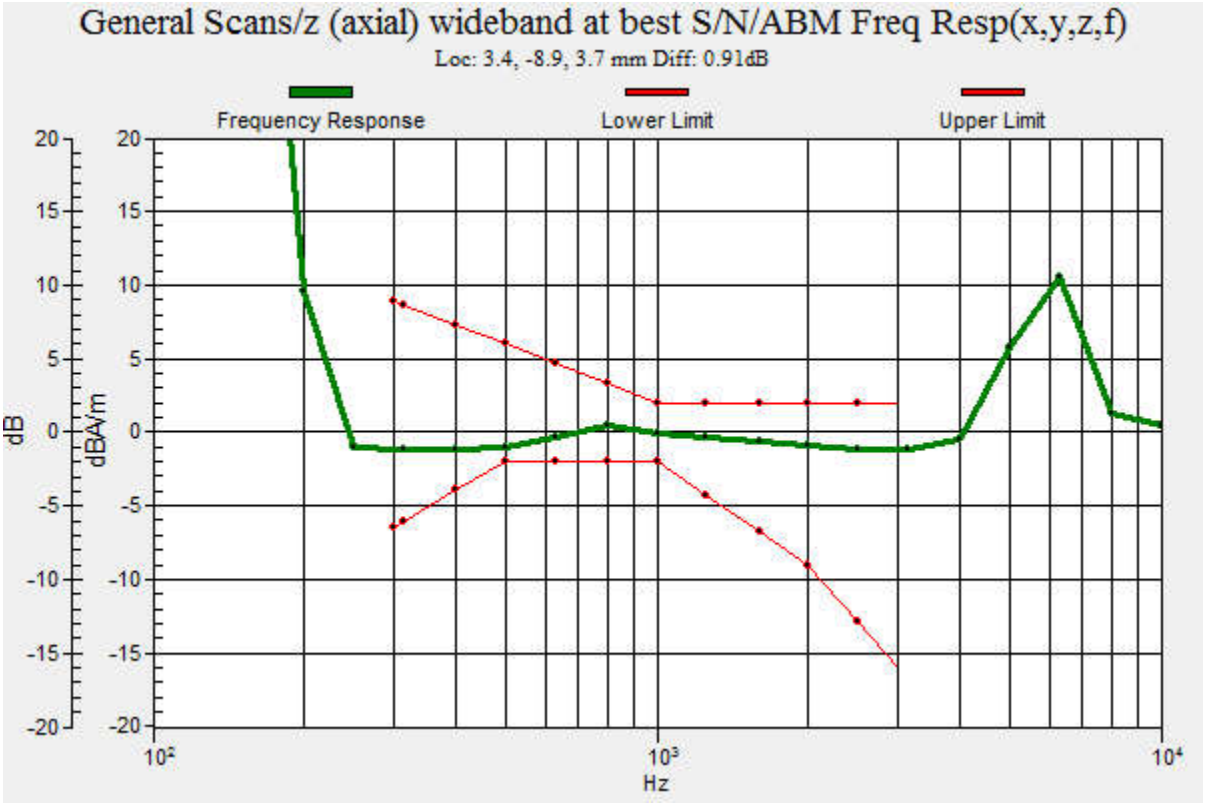
17_HAC T-Coil_WLAN5GHz_802.11ac-VHT20 MCS0_Ch116_Z

Communication System: UID 0, WIFI (0); Frequency: 5580 MHz;Duty Cycle: 1:1.018
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch116/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 42.40 dB
ABM1 comp = -0.93 dBA/m
Location: 3.3, -9.2, 3.7 mm

0 dB = 131.8 = 42.40 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 3.4, -8.9, 3.7 mm Diff: 0.91dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

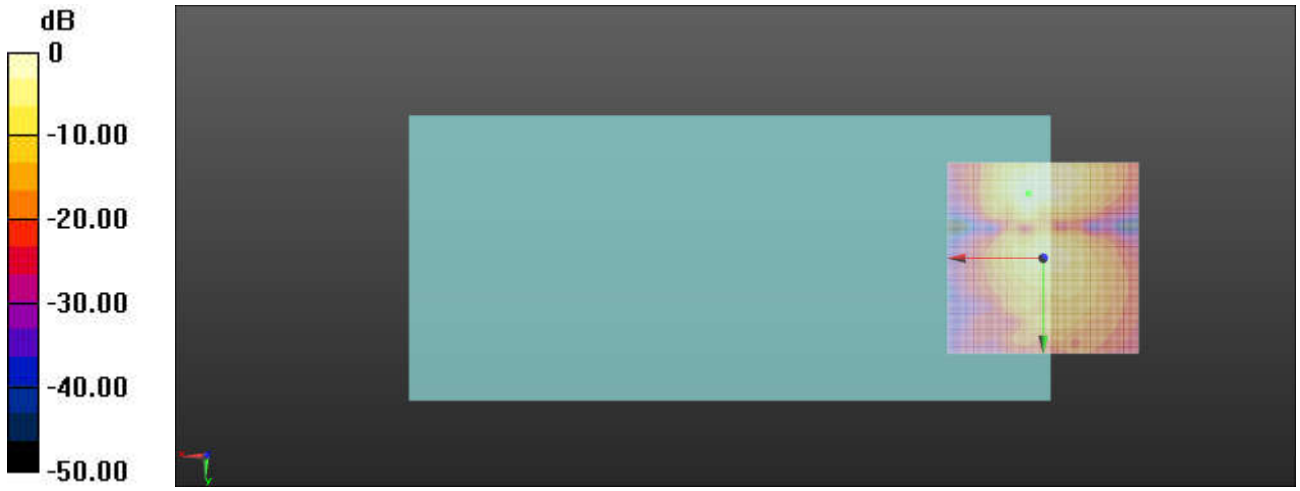
17_HAC T-Coil_WLAN5GHz_802.11ac-VHT20 MCS0_Ch116_Y

Communication System: UID 0, WIFI (0); Frequency: 5580 MHz;Duty Cycle: 1:1.018
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch116/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 40.17 dB
ABM1 comp = -8.39 dBA/m
Location: 3.8, -17.1, 3.7 mm



0 dB = 101.9 = 40.17 dB

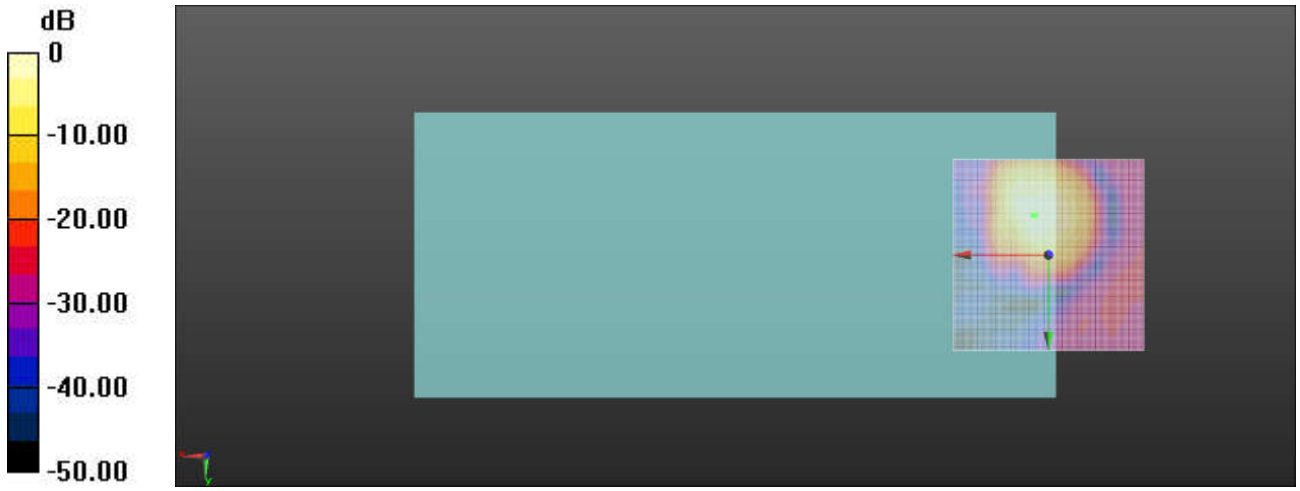
Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

18_HAC T-Coil_WLAN5GHz_802.11ac-VHT20 MCS0_Ch157_Z

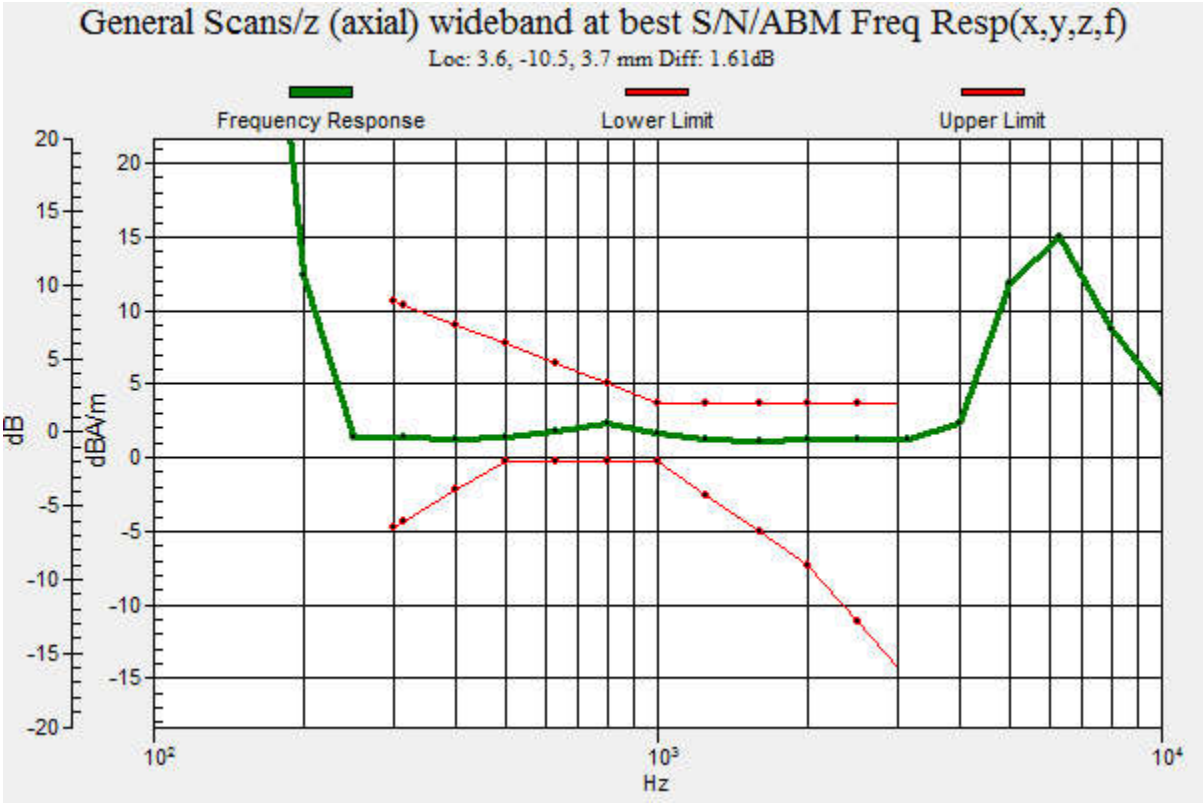
Communication System: UID 0, WIFI (0); Frequency: 5785 MHz;Duty Cycle: 1:1.018
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch157/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 41.80 dB
ABM1 comp = 0.15 dBA/m
Location: 3.8, -10.4, 3.7 mm



0 dB = 123.0 = 41.80 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 3.6, -10.5, 3.7 mm Diff: 1.61dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
20
15
10
5
0
-5
-10
-15
-20
10^2
10^3
10^4
Hz

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab Date: 2022/7/19

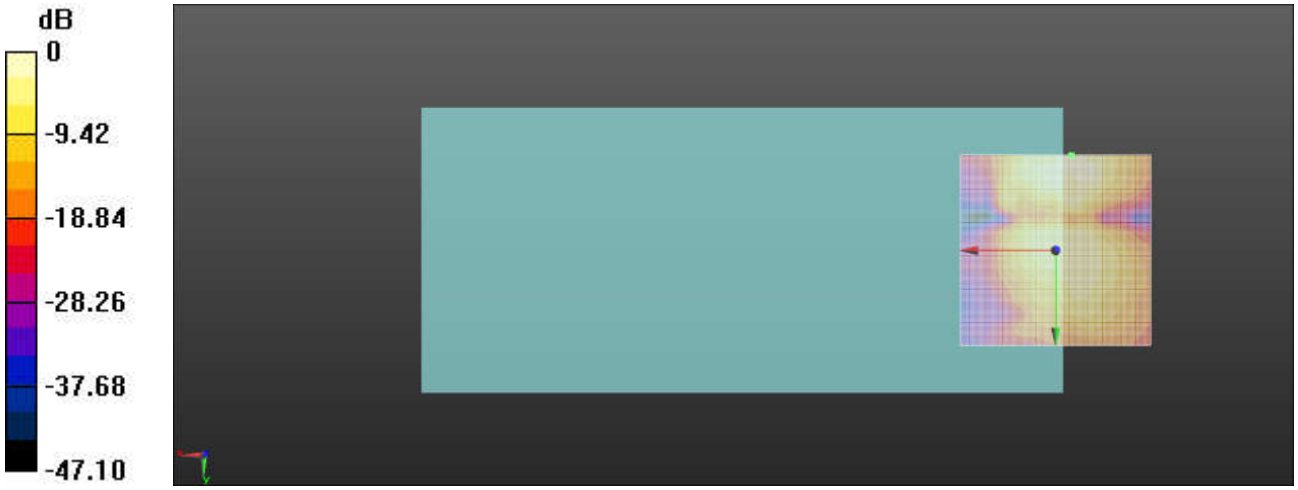
18_HAC T-Coil_WLAN5GHz_802.11ac-VHT20 MCS0_Ch157_Y

Communication System: UID 0, WIFI (0); Frequency: 5785 MHz;Duty Cycle: 1:1.018
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.4 ℃

DASY5 Configuration:
- Probe: AM1DV3 - 3106; ; Calibrated: 2021/11/23
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1664; Calibrated: 2022/5/30
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Ch157/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 37.31 dB
ABM1 comp = -14.94 dBA/m
Location: -4.2, -25, 3.7 mm



0 dB = 73.33 = 37.31 dB

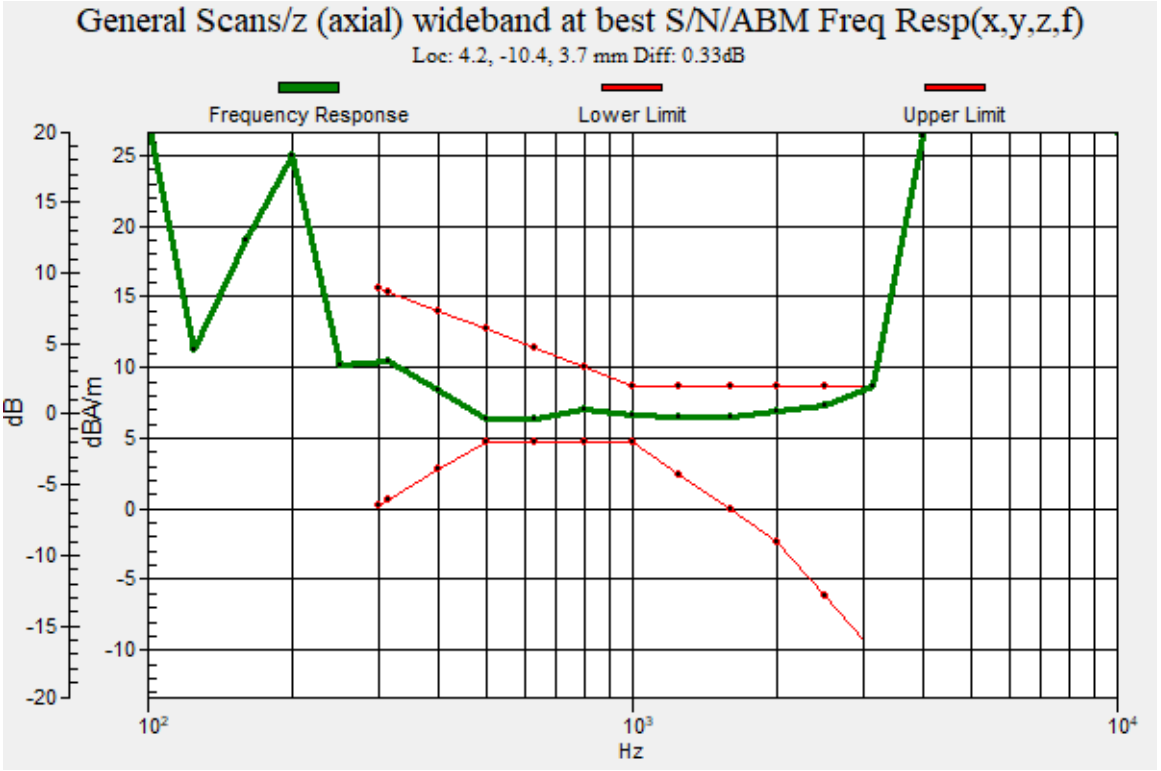
19_HAC_T-Coil_GSM850_Voice_Ch189_Axial (Z)

Communication System: GSM850; Frequency: 836.4 MHz
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.6 ℃

DASY5 Configuration
- Probe: AM1DV3 - 3130; ; Calibrated: 2021/8/26
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1311; Calibrated: 2021/8/20
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 37.15 dB
ABM1 comp = 8.24 dBA/m
Location: 4, -10.3, 3.7 mm

0 dB = 71.99 = 37.15 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.2, -10.4, 3.7 mm Diff: 0.33dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-15
-20
25
20
15
10
5
0
-5
-10
10^2
10^3
10^4

19_HAC_T-Coil_GSM850_Voice_Ch189_Transversal (Y)

Communication System: GSM850; Frequency: 836.4 MHz
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.6 ℃

DASY5 Configuration
- Probe: AM1DV3 - 3130; ; Calibrated: 2021/8/26
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1311; Calibrated: 2021/8/20
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 36.13 dB
ABM1 comp = -3.30 dBA/m
Location: 3.3, -4, 3.7 mm

0 dB = 64.07 = 36.13 dB

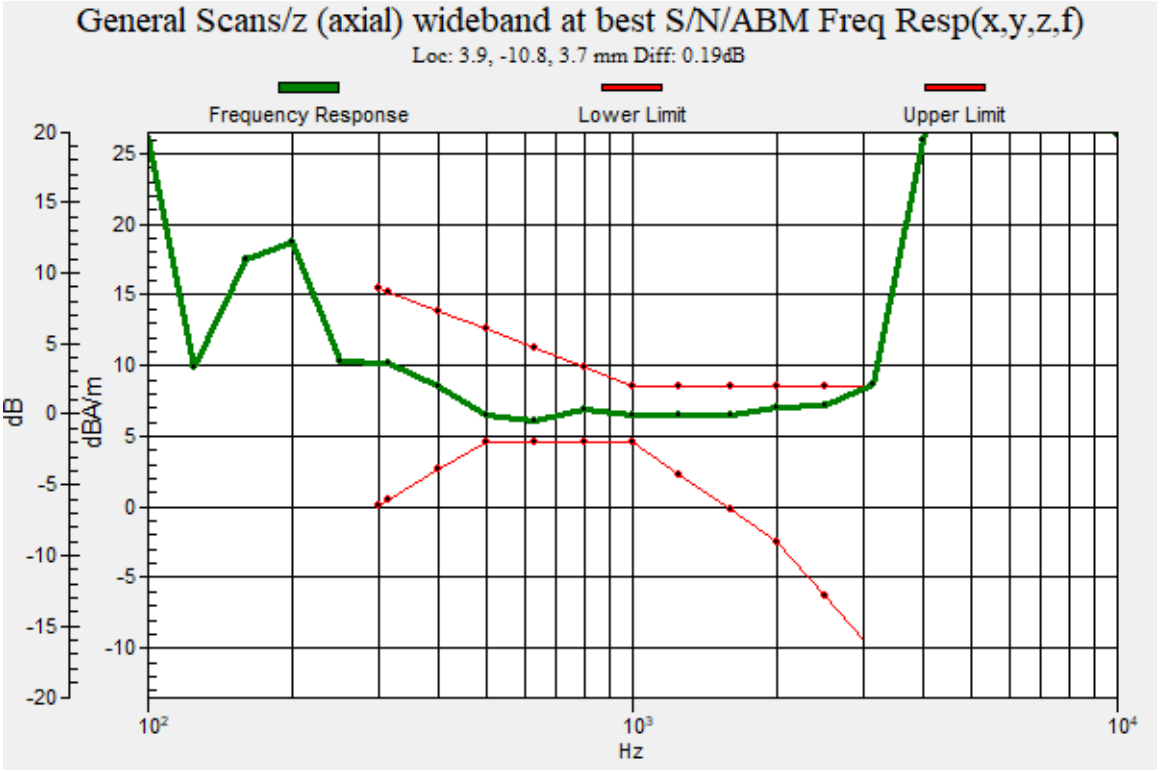
20_HAC_T-Coil_GSM1900_Voice_Ch661_Axial (Z)

Communication System: PCS; Frequency: 1880 MHz
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.6 ℃

DASY5 Configuration
- Probe: AM1DV3 - 3130; ; Calibrated: 2021/8/26
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1311; Calibrated: 2021/8/20
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 48.01 dB
ABM1 comp = 9.51 dBA/m
Location: 4, -11, 3.7 mm

0 dB = 251.5 = 48.01 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 3.9, -10.8, 3.7 mm Diff: 0.19dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-15
-20
25
20
15
10
5
0
-5
-10
10^2
10^3
10^4

20_HAC_T-Coil_GSM1900_Voice_Ch661_Transversal (Y)

Communication System: PCS; Frequency: 1880 MHz
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.6 ℃

DASY5 Configuration
- Probe: AM1DV3 - 3130; ; Calibrated: 2021/8/26
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1311; Calibrated: 2021/8/20
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 40.27 dB
ABM1 comp = -0.25 dBA/m
Location: 3.3, -3.3, 3.7 mm

0 dB = 103.2 = 40.27 dB

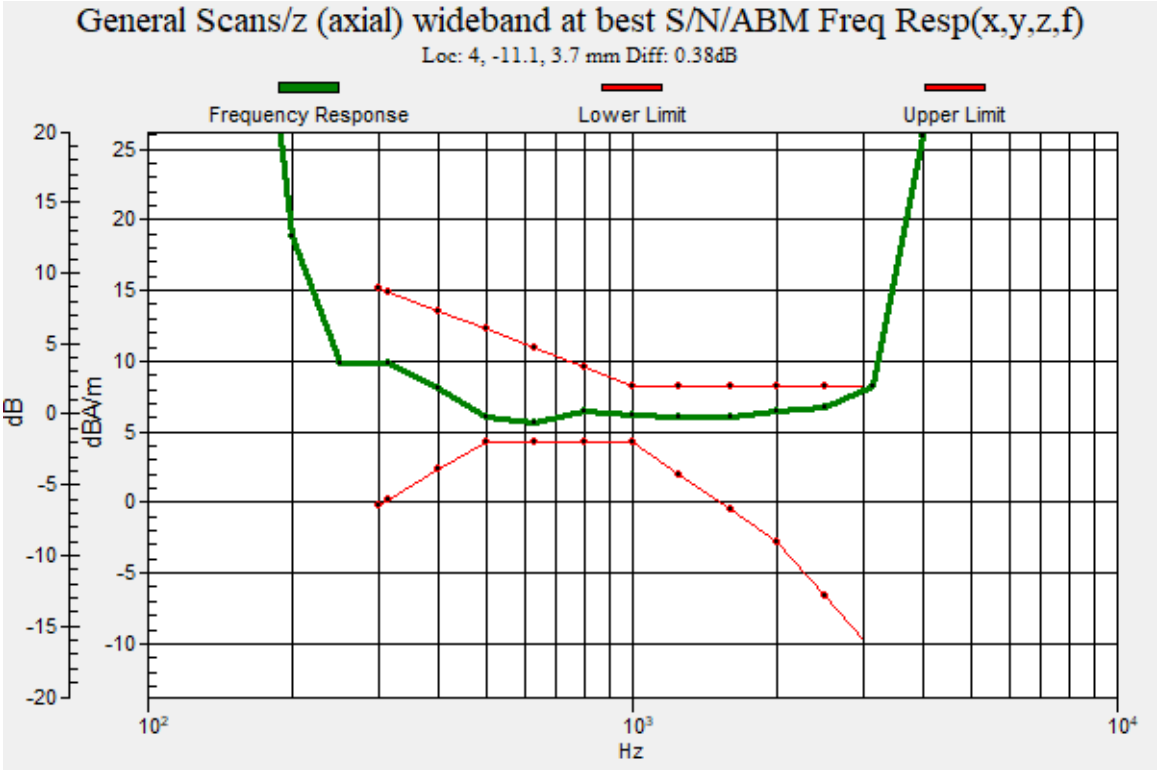
21_HAC_WCDMA II_HSPA_Ch9400_Axial (Z)

Communication System: WCDMA; Frequency: 1880 MHz
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.6 ℃

DASY5 Configuration
- Probe: AM1DV3 - 3130; ; Calibrated: 2021/8/26
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1311; Calibrated: 2021/8/20
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 55.83 dB
ABM1 comp = 8.97 dBA/m
Location: 4, -11, 3.7 mm

0 dB = 619.0 = 55.83 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4, -11.1, 3.7 mm Diff: 0.38dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
25
20
15
10
5
0
-5
-10
10^2
10^3
10^4

21_HAC_WCDMA II_HSPA_Ch9400_Transversal (Y)

Communication System: WCDMA; Frequency: 1880 MHz
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.6 ℃

DASY5 Configuration
- Probe: AM1DV3 - 3130; ; Calibrated: 2021/8/26
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1311; Calibrated: 2021/8/20
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 48.58 dB
ABM1 comp = 0.85 dBA/m
Location: 4, -18.7, 3.7 mm

0 dB = 268.5 = 48.58 dB

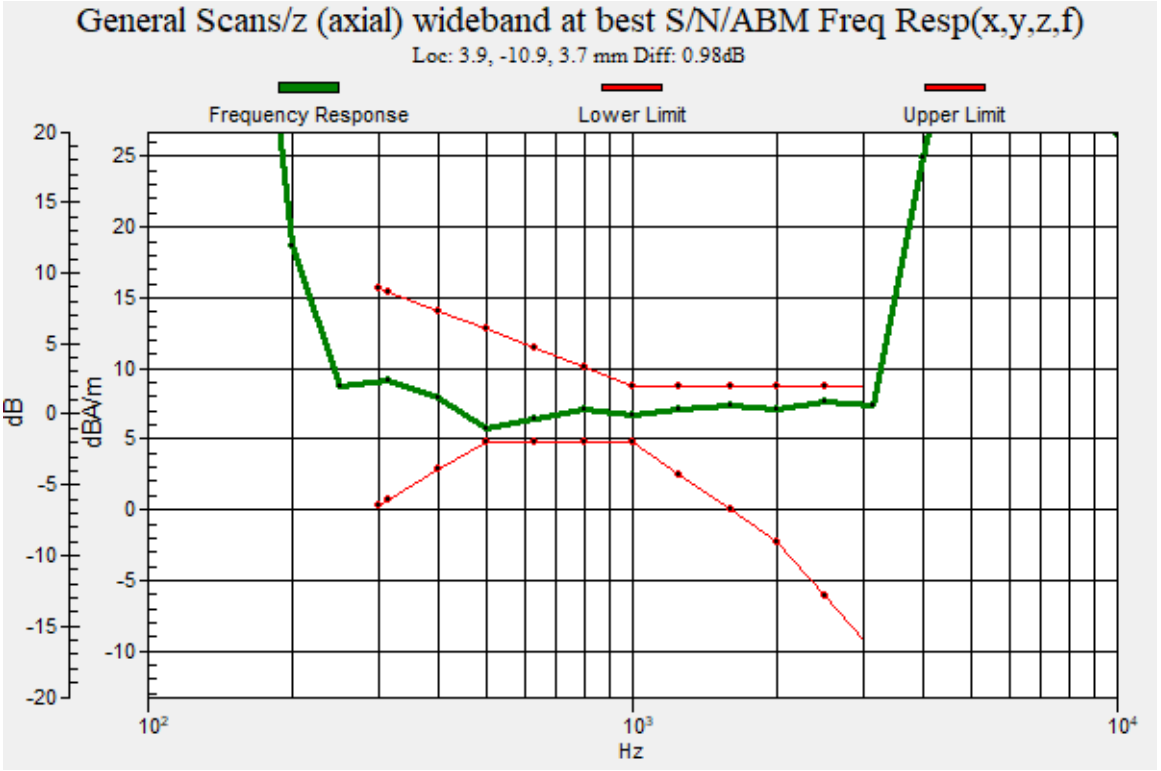
22_HAC_WCDMA IV_HSPA_Ch1413_Axial (Z)

Communication System: WCDMA; Frequency: 1732.6 MHz
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.6 ℃

DASY5 Configuration
- Probe: AM1DV3 - 3130; ; Calibrated: 2021/8/26
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1311; Calibrated: 2021/8/20
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 56.52 dB
ABM1 comp = 8.52 dBA/m
Location: 4, -11, 3.7 mm

0 dB = 670.1 = 56.52 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 3.9, -10.9, 3.7 mm Diff: 0.98dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-15
-20
25
20
15
10
5
0
-5
-10
10^2
10^3
10^4

22_HAC_WCDMA IV_HSPA_Ch1413_Transversal (Y)

Communication System: WCDMA; Frequency: 1732.6 MHz
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.6 ℃

DASY5 Configuration
- Probe: AM1DV3 - 3130; ; Calibrated: 2021/8/26
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1311; Calibrated: 2021/8/20
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 47.50 dB
ABM1 comp = 0.28 dBA/m
Location: 4, -18.7, 3.7 mm

0 dB = 237.2 = 47.50 dB

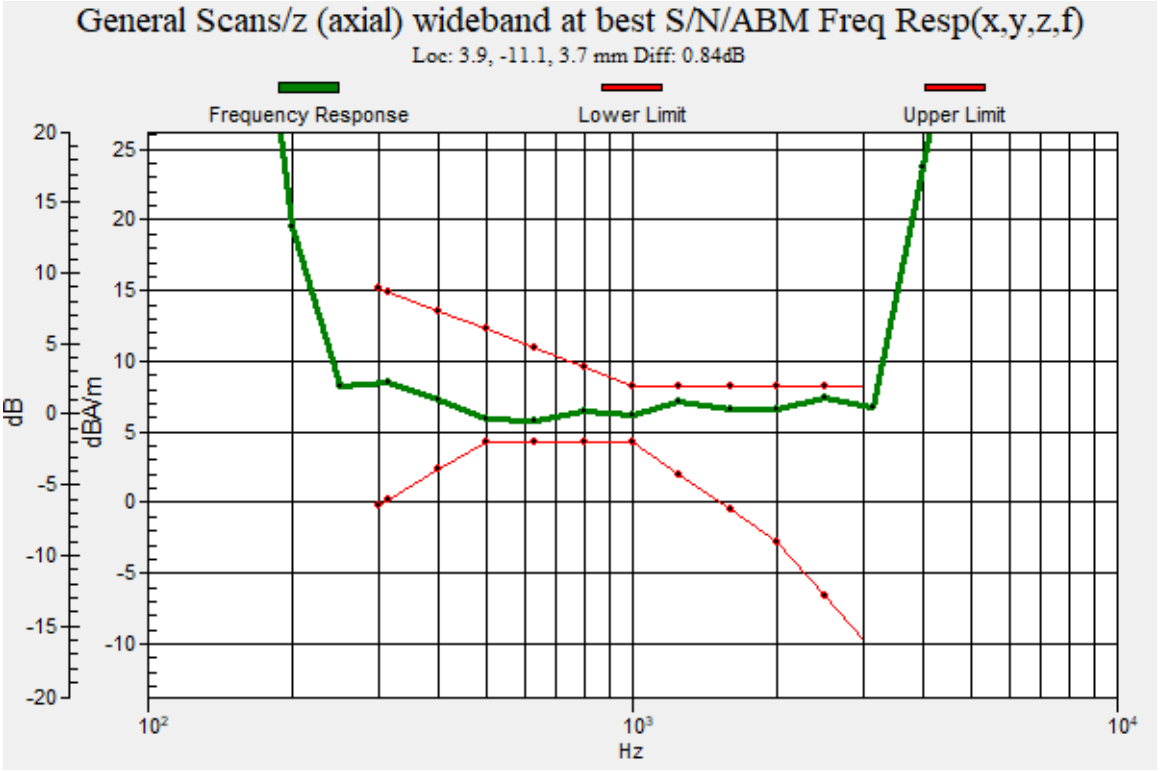
23_HAC_WCDMA V_HSPA_Ch4182_Axial (Z)

Communication System: WCDMA; Frequency: 836.4 MHz
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.6 ℃

DASY5 Configuration
- Probe: AM1DV3 - 3130; ; Calibrated: 2021/8/26
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1311; Calibrated: 2021/8/20
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 56.35 dB
ABM1 comp = 8.54 dBA/m
Location: 4, -11, 3.7 mm

0 dB = 657.1 = 56.35 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 3.9, -11.1, 3.7 mm Diff: 0.84dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
25
20
15
10
5
0
-5
-10
10^2
10^3
10^4

23_HAC_WCDMA V_HSPA_Ch4182_Transversal (Y)

Communication System: WCDMA; Frequency: 836.4 MHz
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.6 ℃

DASY5 Configuration
- Probe: AM1DV3 - 3130; ; Calibrated: 2021/8/26
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1311; Calibrated: 2021/8/20
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 45.26 dB
ABM1 comp = -0.04 dBA/m
Location: 2.6, -19.4, 3.7 mm

0 dB = 183.3 = 45.26 dB

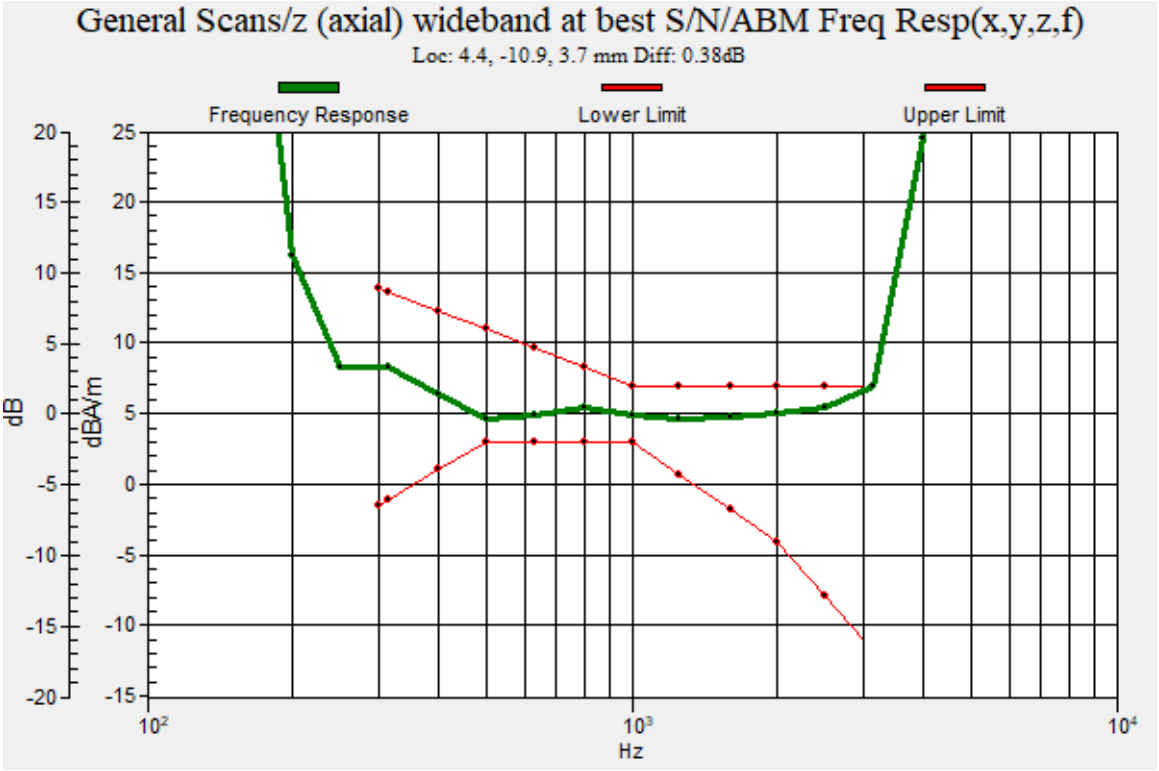
24_HAC_T-Coil_LTE Band 7_20M_QPSK_1_0_Ch21100_Axial (Z)

Communication System: LTE; Frequency: 2535 MHz
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.6 ℃

DASY5 Configuration
- Probe: AM1DV3 - 3130; ; Calibrated: 2021/8/26
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1311; Calibrated: 2021/8/20
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

General Scans/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 51.74 dB
ABM1 comp = 7.45 dBA/m
Location: 4.7, -11, 3.7 mm

0 dB = 386.4 = 51.74 dB


General Scans/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f)
Loc: 4.4, -10.9, 3.7 mm Diff: 0.38dB
Frequency Response
Lower Limit
Upper Limit
dB
dBA/m
Hz
20
15
10
5
0
-5
-10
-15
-20
25
20
15
10
5
0
-5
-10
-15
10^2
10^3
10^4

24_HAC_T-Coil_LTE Band 7_20M_QPSK_1_0_Ch21100_Transversal (Y)

Communication System: LTE; Frequency: 2535 MHz
Medium: Air Medium parameters used: $\sigma = 0$ S/m, $\varepsilon_r = 1$; $\rho = 0$ kg/m^3
Ambient Temperature：23.6 ℃

DASY5 Configuration
- Probe: AM1DV3 - 3130; ; Calibrated: 2021/8/26
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn1311; Calibrated: 2021/8/20
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA;
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

General Scans/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm
ABM1/ABM2 = 44.52 dB
ABM1 comp = -0.54 dBA/m
Location: 3.3, -18, 3.7 mm

0 dB = 168.2 = 44.52 dB