Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/18/2017

GSM850

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 1 slot) (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.00018

T-Coil scan (scan for ANSI C63.19 2011 compliance)/GSM850 Ch 190 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

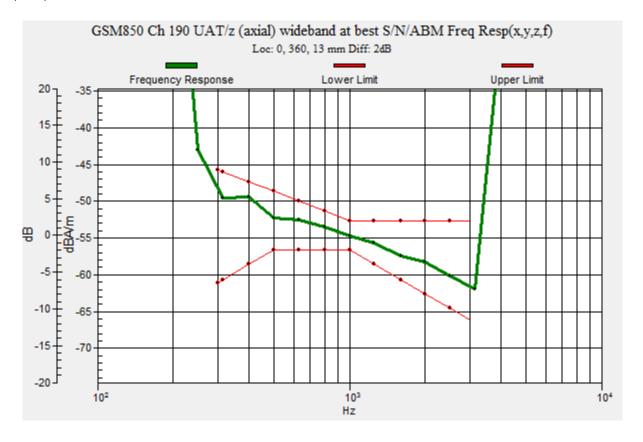
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 2.00 dB



GSM850

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 1 slot) (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.00018

Date: 4/18/2017

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/GSM850 Ch 190 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

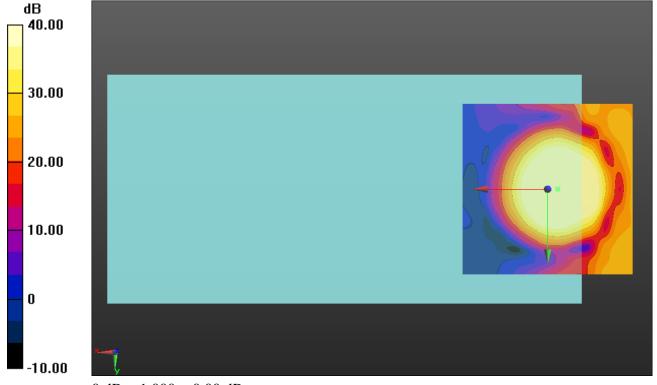
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 50.90 dB ABM1 comp = 9.50 dBA/m BWC Factor = 0.16 dB Location: -2.9, 0, 3.7 mm



GSM850

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 1 slot) (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.00018

Date: 4/18/2017

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/GSM850 Ch 190 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

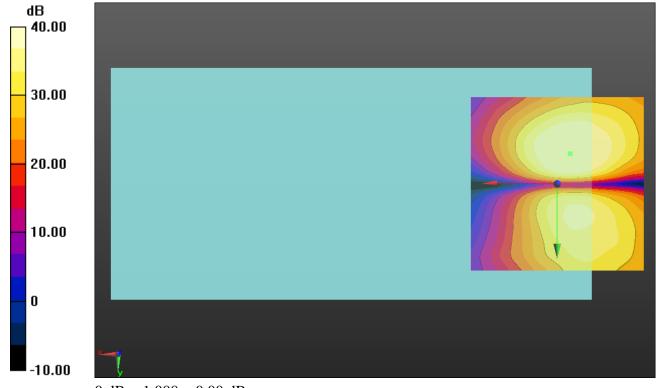
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 43.60 dB ABM1 comp = 0.96 dBA/m BWC Factor = 0.16 dB Location: -3.7, -8.8, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2

GSM1900

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 1 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:8.00018

Date: 4/18/2017

T-Coil scan (scan for ANSI C63.19 2011 compliance)/GSM1900 Ch 661 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

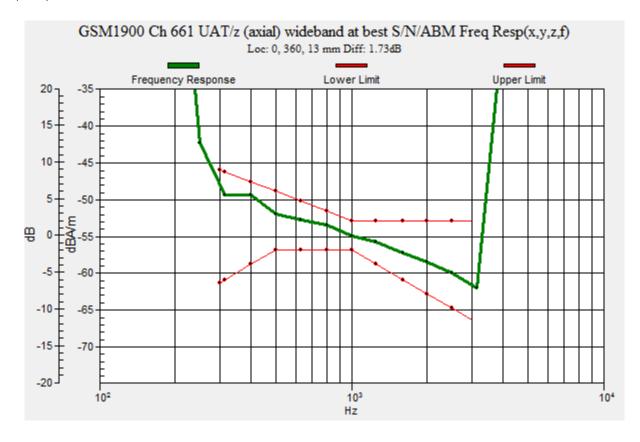
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.73 dB



GSM1900

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 1 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:8.00018

Date: 4/18/2017

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/GSM1900 Ch 661 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

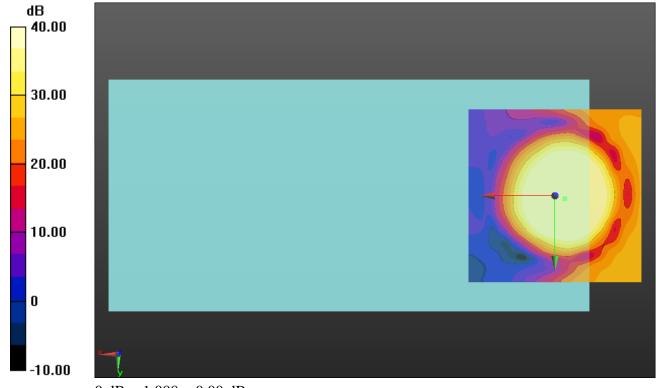
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 53.00 dB ABM1 comp = 9.38 dBA/m BWC Factor = 0.16 dB Location: -2.9, 0.8, 3.7 mm



GSM1900

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 1 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:8.00018

Date: 4/18/2017

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/GSM1900 Ch 661 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

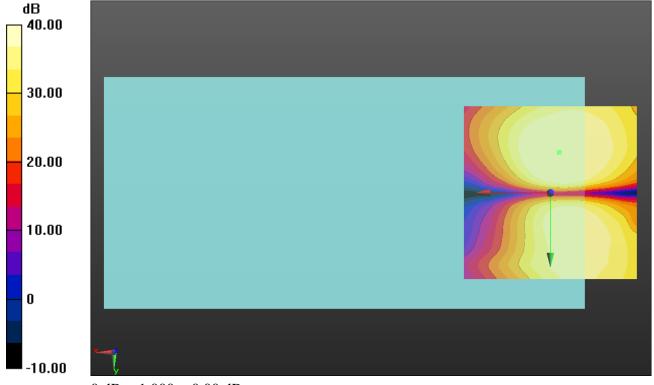
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 44.42 dB ABM1 comp = 0.22 dBA/m BWC Factor = 0.16 dB Location: -2.5, -11.7, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/19/2017

W-CDMA Band V

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band V Ch 4183 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

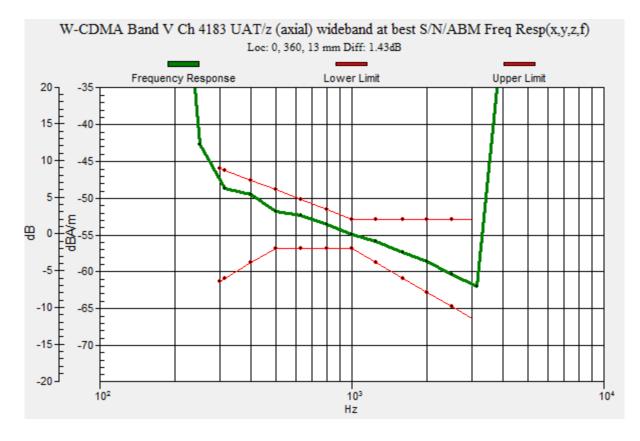
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.43 dB



W-CDMA Band V

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band V Ch 4183 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/19/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

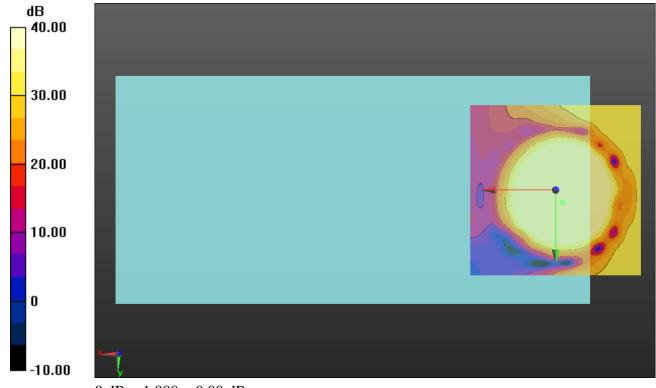
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 57.96 dB ABM1 comp = 9.91 dBA/m BWC Factor = 0.16 dB Location: -2.1, 3.7, 3.7 mm



W-CDMA Band V

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band V Ch 4183 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

Date: 4/19/2017

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

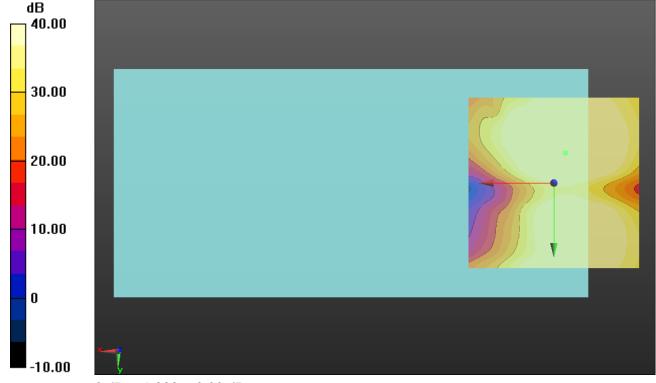
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 49.67 dB ABM1 comp = 0.96 dBA/m BWC Factor = 0.16 dB Location: -3.3, -8.8, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/19/2017

W-CDMA Band IV

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band IV Ch 1413 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

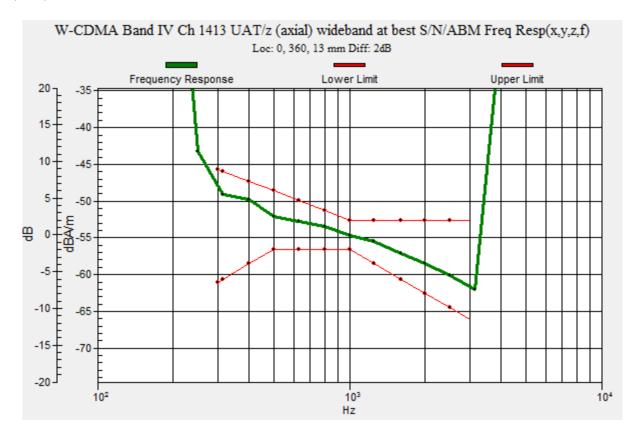
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 2.00 dB



W-CDMA Band IV

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band IV Ch 1413 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/19/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

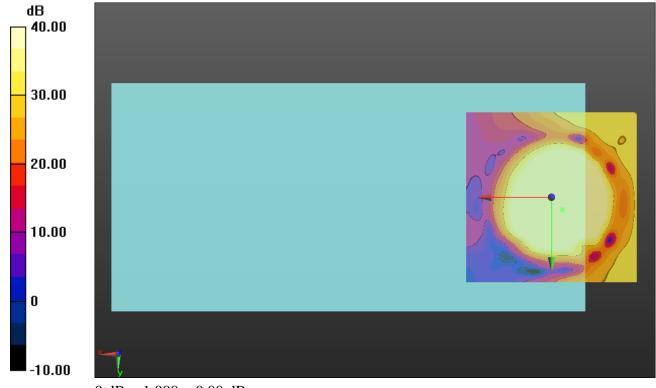
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 57.45 dB ABM1 comp = 8.91 dBA/m BWC Factor = 0.16 dB Location: -3.3, 3.7, 3.7 mm



W-CDMA Band IV

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band IV Ch 1413 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

Date: 4/19/2017

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

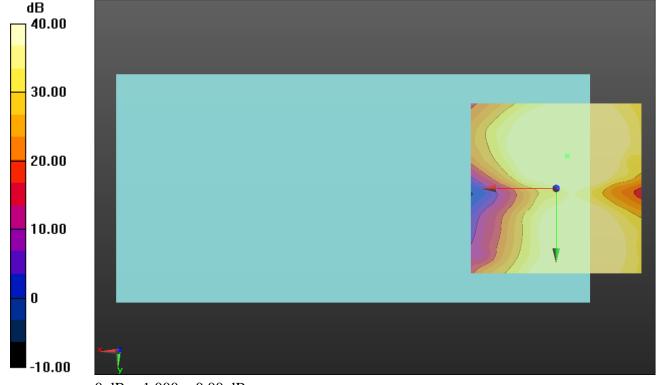
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 50.21 dB ABM1 comp = 0.91 dBA/m BWC Factor = 0.16 dB Location: -3.3, -9.6, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/19/2017

W-CDMA Band II

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band II Ch 9400 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

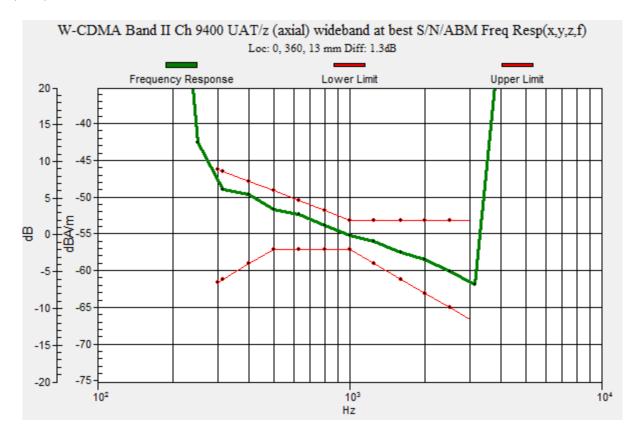
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

5Cursor:

Diff = 1.30 dB



W-CDMA Band II

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band II Ch 9400 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/19/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

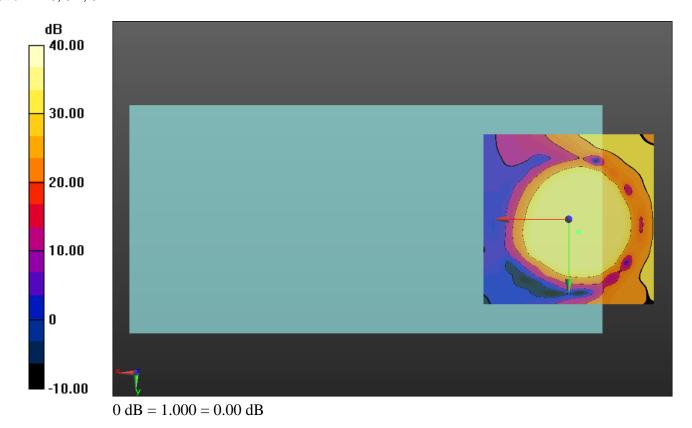
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 56.59 dB ABM1 comp = 9.01 dBA/m BWC Factor = 0.16 dB Location: -2.9, 3.7, 3.7 mm



W-CDMA Band II

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band II Ch 9400 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

Date: 4/19/2017

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

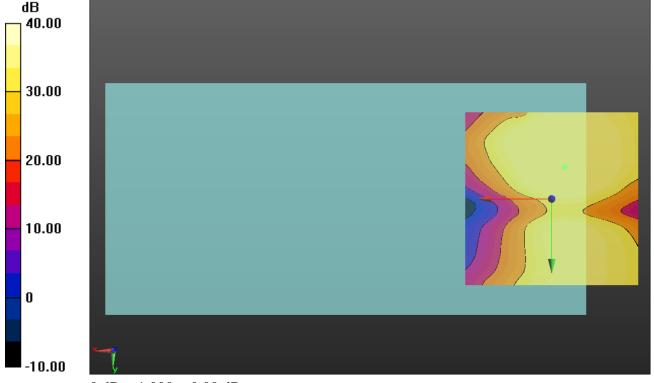
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 47.27 dB ABM1 comp = -0.04 dBA/m BWC Factor = 0.16 dB Location: -3.7, -9.2, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/17/2017

CDMA BC0

Communication System: UID 0, CDMA2000 (0); Frequency: 836.52 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC0 Ch 384 Eighth UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

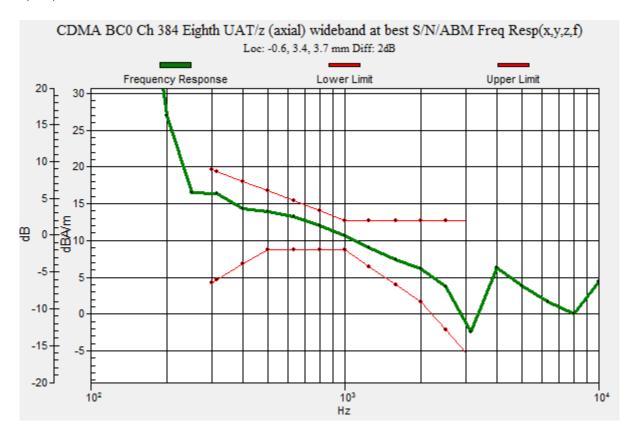
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 2.00 dB

BWC Factor = 10.80 dB Location: -0.6, 3.4, 3.7 mm



CDMA BC0

Communication System: UID 0, CDMA2000 (0); Frequency: 836.52 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC0 Ch 384 Eighth UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/17/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

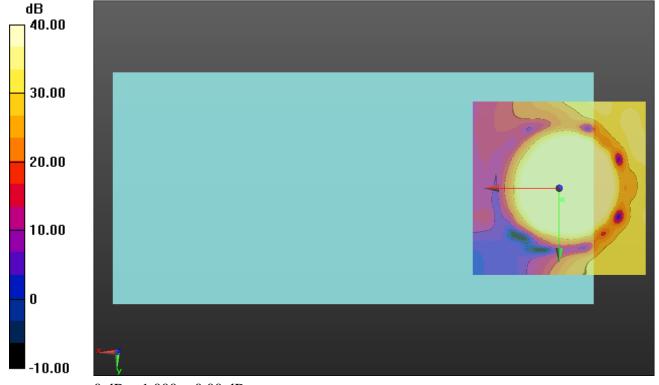
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 58.22 dB ABM1 comp = 10.99 dBA/m BWC Factor = 0.16 dB Location: -0.8, 3.3, 3.7 mm



CDMA BC0

Communication System: UID 0, CDMA2000 (0); Frequency: 836.52 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC0 Ch 384 Eighth UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

Date: 4/17/2017

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

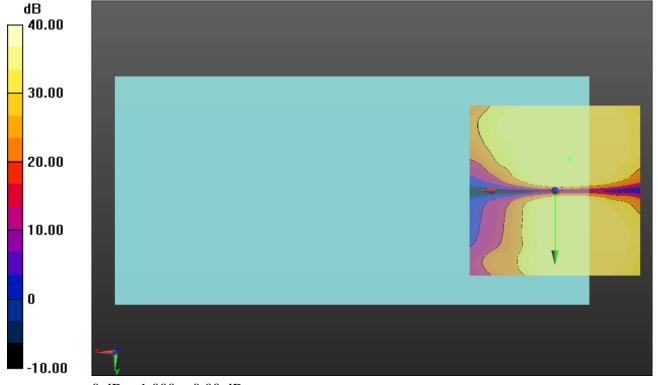
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 51.82 dB ABM1 comp = 3.49 dBA/m BWC Factor = 0.16 dB Location: -4.2, -9.2, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/17/2017

CDMA BC1

Communication System: UID 0, CDMA2000 (0); Frequency: 1880 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC1 Ch 600 Eighth UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

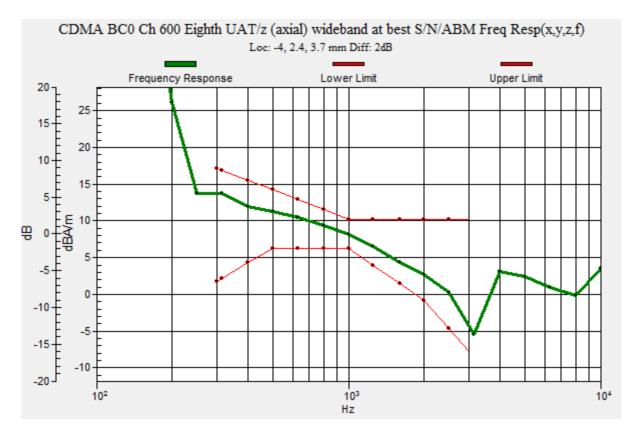
Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 2.00 dB

BWC Factor = 10.80 dB Location: -4, 2.4, 3.7 mm



CDMA BC1

Communication System: UID 0, CDMA2000 (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC1 Ch 600 Eighth UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/17/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

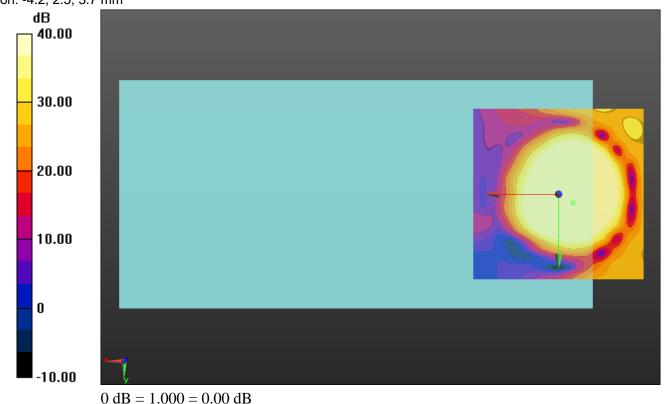
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 56.00 dB ABM1 comp = 7.36 dBA/m BWC Factor = 0.16 dB Location: -4.2, 2.5, 3.7 mm



CDMA BC1

Communication System: UID 0, CDMA2000 (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC1 Ch 600 Eighth UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

Date: 4/17/2017

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

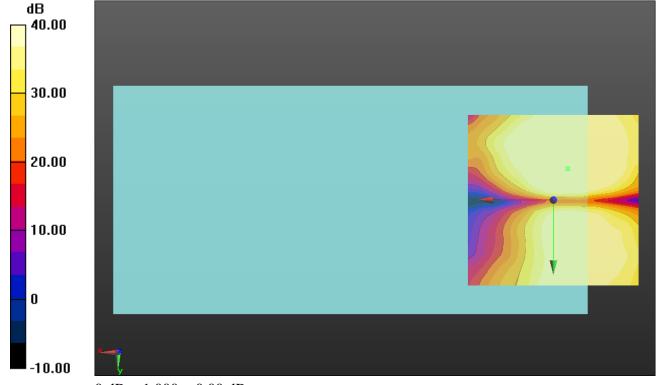
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 48.97 dB ABM1 comp = 0.88 dBA/m BWC Factor = 0.16 dB Location: -4.2, -9.2, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/17/2017

CDMA BC10

Communication System: UID 0, CDMA2000 (0); Frequency: 820.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC10 Ch 580 Eighth UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

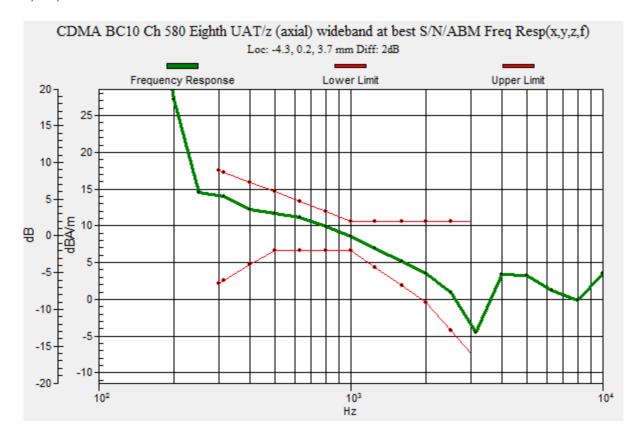
Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 2.00 dB

BWC Factor = 10.80 dB Location: -4.3, 0.2, 3.7 mm



CDMA BC10

Communication System: UID 0, CDMA2000 (0); Frequency: 820.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC10 Ch 580 Eighth UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/17/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

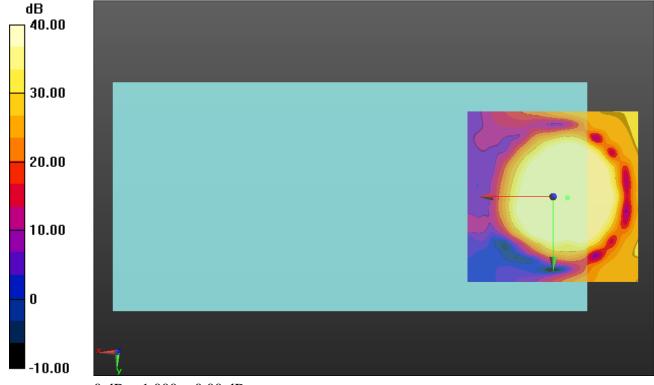
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 56.69 dB ABM1 comp = 8.52 dBA/m BWC Factor = 0.16 dB Location: -4.2, 0.4, 3.7 mm



CDMA BC10

Communication System: UID 0, CDMA2000 (0); Frequency: 820.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC10 Ch 580 Eighth UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

Date: 4/17/2017

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 48.63 dB ABM1 comp = 0.52 dBA/m BWC Factor = 0.16 dB Location: -1.7, -10, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/20/2017

LTE Band 2 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/QPSK Ch. 18900 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

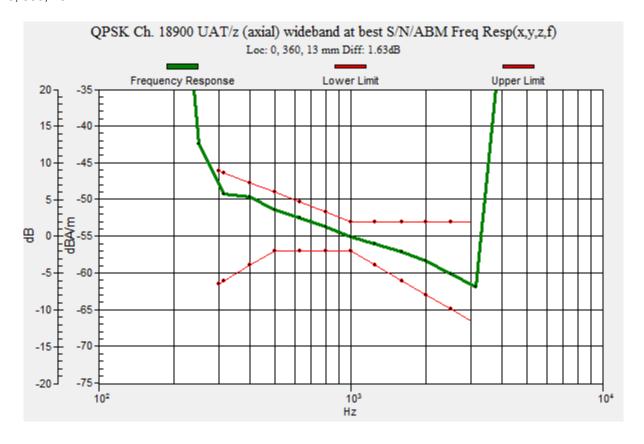
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.63 dB



LTE Band 2 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/QPSK Ch. 18900 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

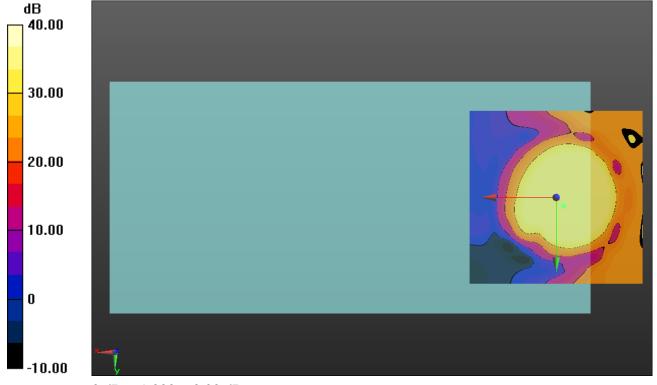
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 53.27 dB ABM1 comp = 9.92 dBA/m BWC Factor = 0.16 dB Location: -2.1, 2.5, 3.7 mm



LTE Band 2 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/QPSK Ch. 18900 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

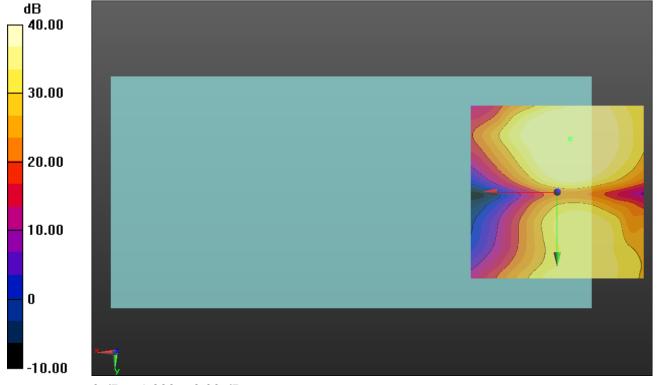
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 43.83 dB ABM1 comp = -3.52 dBA/m BWC Factor = 0.16 dB Location: -3.7, -15.4, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/20/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 4 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 4 Ch. 20175 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

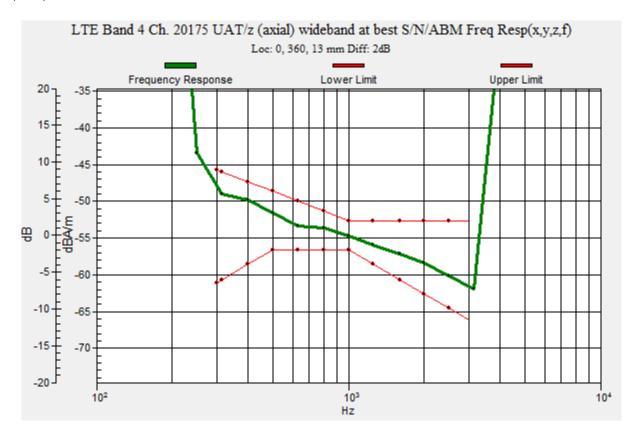
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 2.00 dB



LTE Band 4 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 4 Ch. 20175 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/21/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

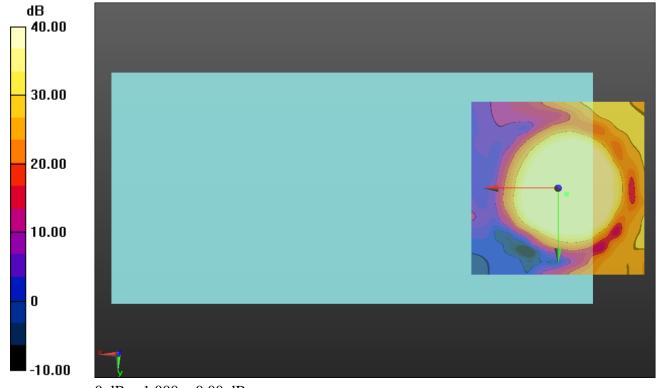
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.59 dB ABM1 comp = 10.26 dBA/m BWC Factor = 0.16 dB Location: -2.5, 1.7, 3.7 mm



LTE Band 4 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 4 Ch. 20175 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

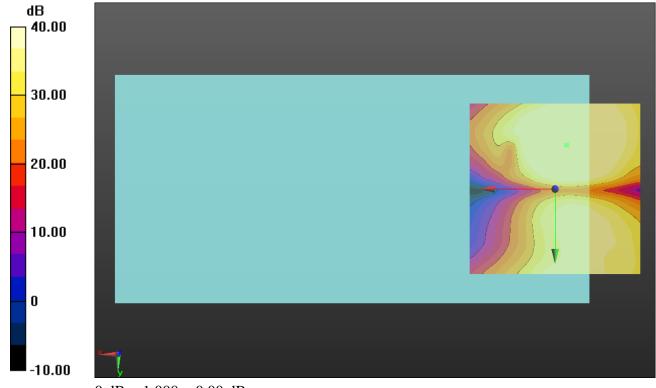
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 46.83 dB ABM1 comp = -0.01 dBA/m BWC Factor = 0.16 dB Location: -3.3, -12.9, 3.7 mm



Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/20/2017

LTE Band 5 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/QPSK Ch. 20525/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

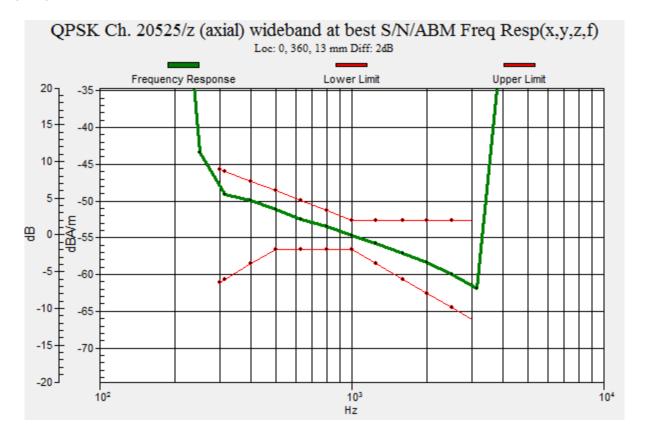
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 2.00 dB



LTE Band 5 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/QPSK Ch. 20525/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Date: 4/19/2017

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

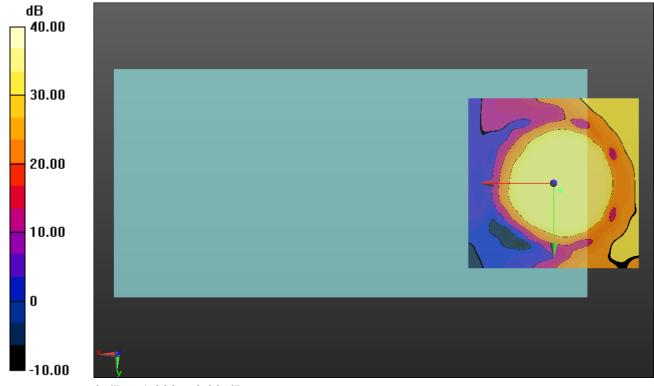
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.77 dB ABM1 comp = 10.17 dBA/m BWC Factor = 0.16 dB Location: -2.1, 2.1, 3.7 mm



LTE Band 5 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/QPSK Ch. 20525/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/19/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

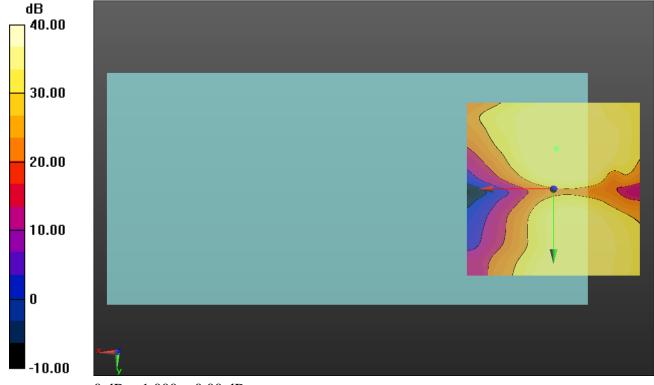
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 44.86 dB ABM1 comp = 0.42 dBA/m BWC Factor = 0.16 dB Location: -0.8, -11.7, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 7 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 7 Ch. 21100 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

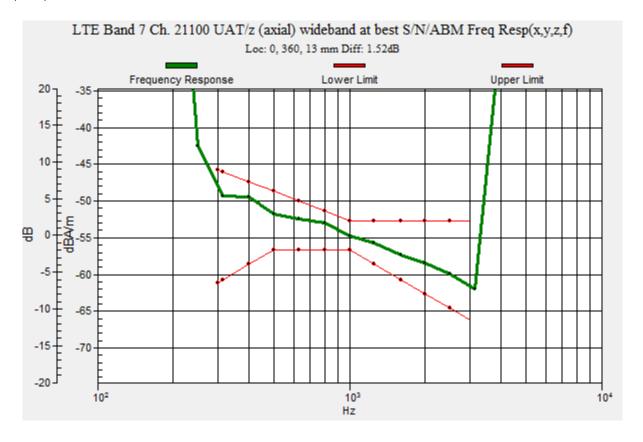
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.52 dB



Test Laboratory: UL Verification Services Inc., SAR Lab 2

LTE Band 7 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 7 Ch. 21100 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/21/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

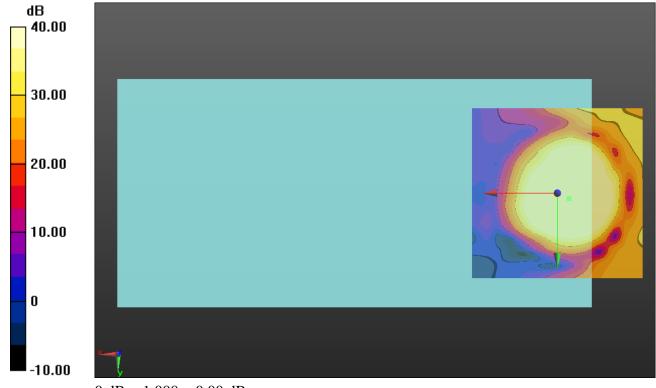
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.79 dB ABM1 comp = 9.70 dBA/m BWC Factor = 0.16 dB Location: -3.3, 1.7, 3.7 mm



LTE Band 7 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 7 Ch. 21100 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

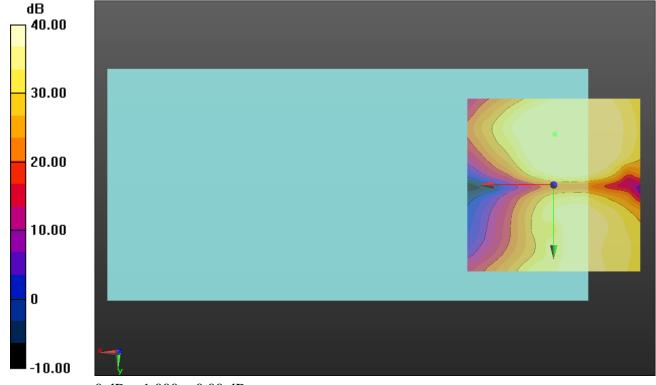
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.38 dB ABM1 comp = -1.66 dBA/m BWC Factor = 0.16 dB Location: -0.4, -14.6, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 12 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 12 Ch. 23095 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

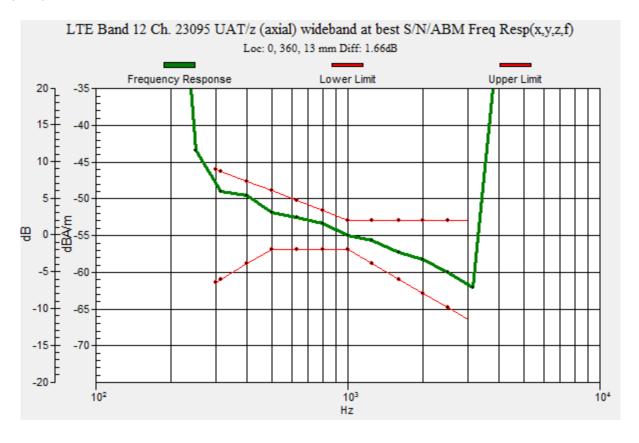
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.66 dB



LTE Band 12 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 12 Ch. 23095 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/21/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

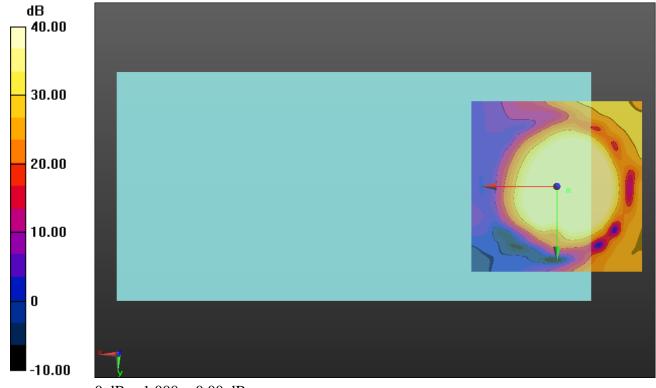
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.19 dB ABM1 comp = 9.47 dBA/m BWC Factor = 0.16 dB Location: -3.3, 1.2, 3.7 mm



LTE Band 12 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 12 Ch. 23095 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

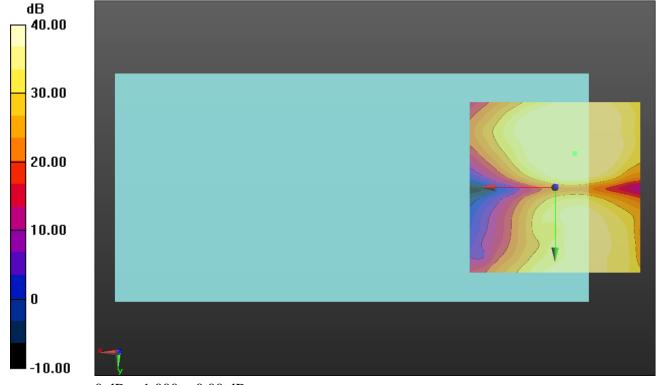
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.61 dB ABM1 comp = -0.23 dBA/m BWC Factor = 0.16 dB Location: -5.8, -10, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 13 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 782 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 13 Ch. 23230 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

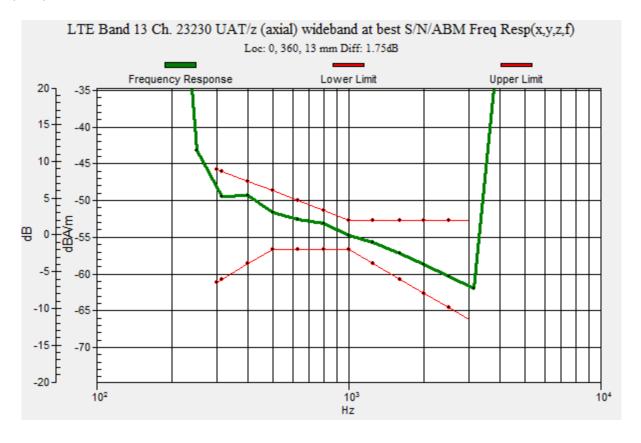
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.75 dB



LTE Band 13 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 782 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 13 Ch. 23230 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/21/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

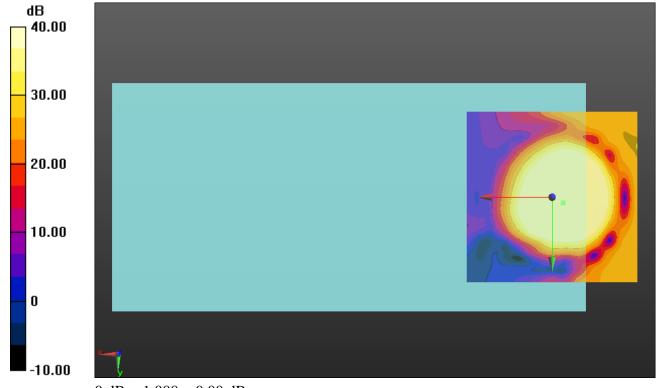
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.74 dB ABM1 comp = 9.60 dBA/m BWC Factor = 0.16 dB Location: -3.3, 1.7, 3.7 mm



LTE Band 13 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 782 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 13 Ch. 23230 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k voice 1kHz 1s.wav

Output Gain: 100

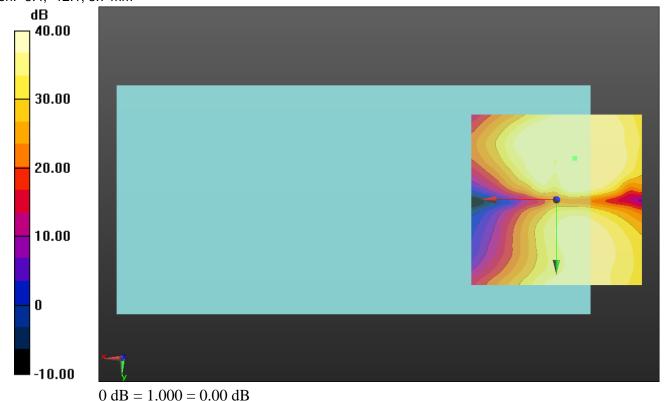
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 46.41 dB ABM1 comp = -0.76 dBA/m BWC Factor = 0.16 dB Location: -5.4, -12.1, 3.7 mm



Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 17 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 710 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 17 Ch. 23790 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

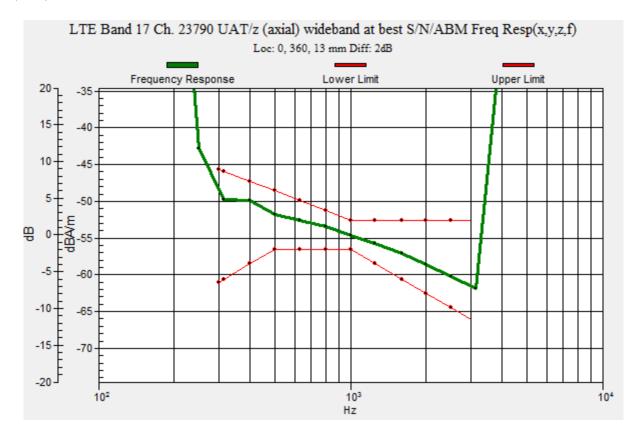
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 2.00 dB



LTE Band 17 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 710 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 17 Ch. 23790 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/21/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

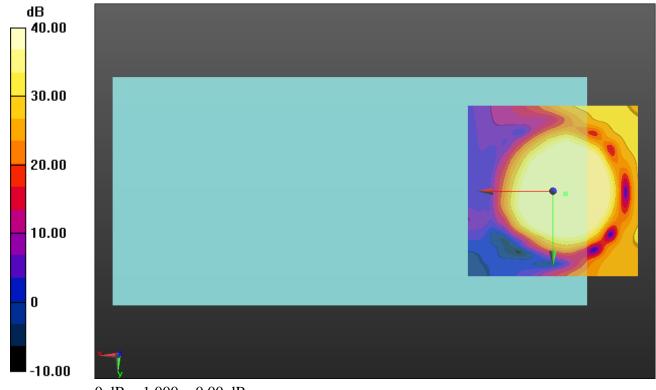
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.41 dB ABM1 comp = 9.63 dBA/m BWC Factor = 0.16 dB Location: -3.7, 0.8, 3.7 mm



LTE Band 17 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 710 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 17 Ch. 23790 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

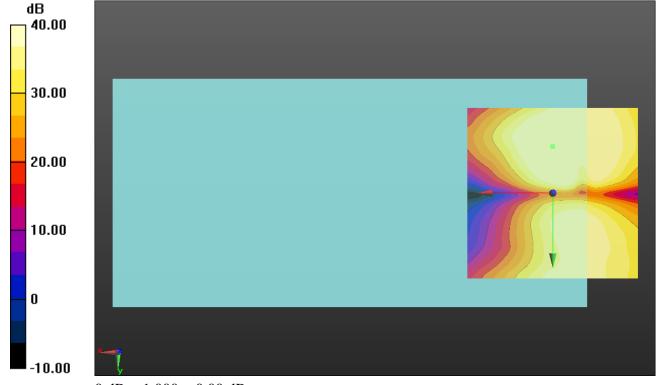
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.91 dB ABM1 comp = -0.90 dBA/m BWC Factor = 0.16 dB Location: 0, -13.8, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 25 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 25 Ch. 26365 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

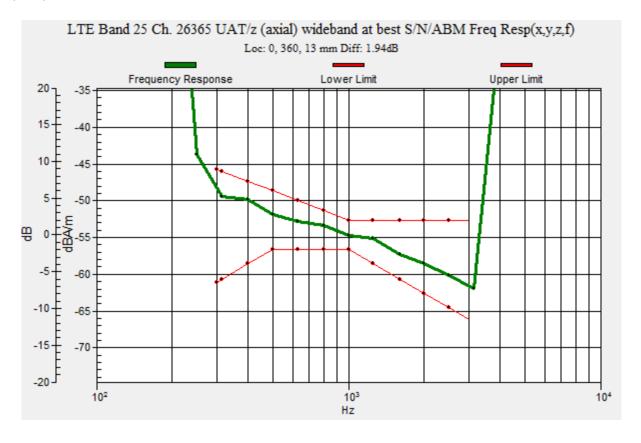
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.94 dB



LTE Band 25 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 25 Ch. 26365 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/21/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

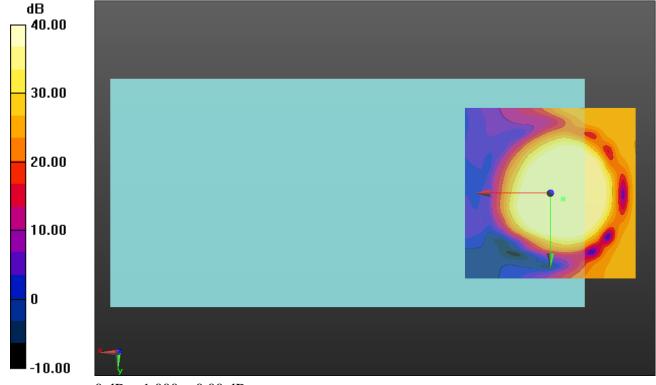
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.54 dB ABM1 comp = 9.45 dBA/m BWC Factor = 0.16 dB Location: -3.7, 1.7, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 25 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 25 Ch. 26365 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

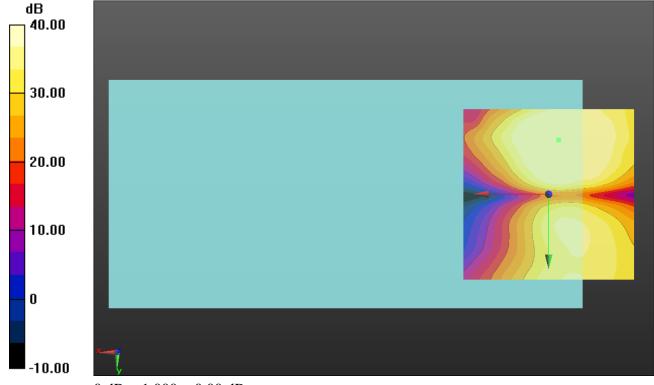
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.11 dB ABM1 comp = -2.97 dBA/m BWC Factor = 0.16 dB Location: -2.9, -15.8, 3.7 mm



Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 26 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 26 Ch. 26865 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

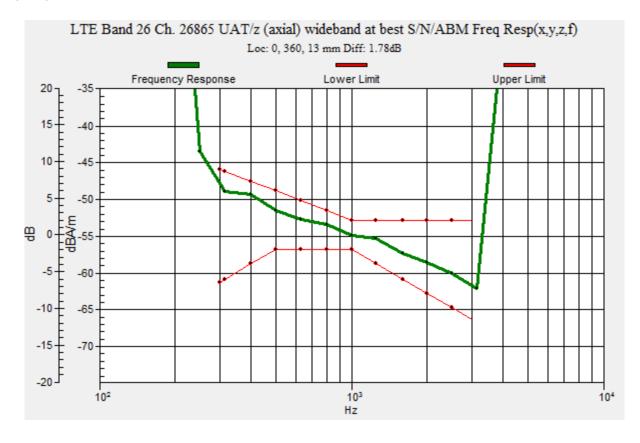
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.78 dB



LTE Band 26 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 26 Ch. 26865 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/21/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

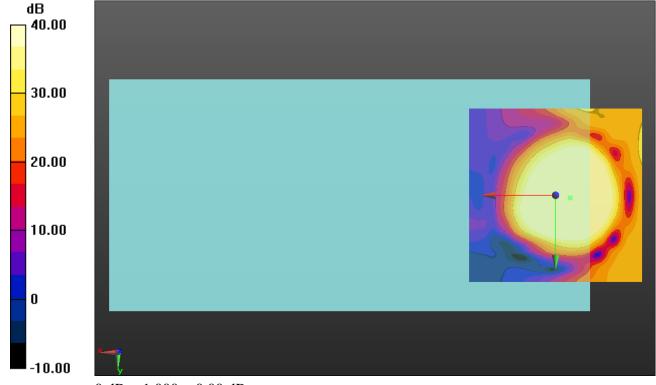
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.42 dB ABM1 comp = 10.12 dBA/m BWC Factor = 0.16 dB Location: -4.2, 0.8, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 26 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 26 Ch. 26865 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

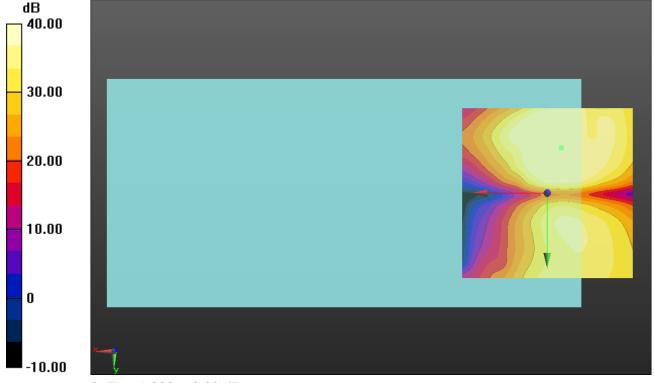
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.49 dB ABM1 comp = -1.04 dBA/m BWC Factor = 0.16 dB Location: -4.2, -13.3, 3.7 mm



Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/22/2017

LTE Band 30 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2310 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 30 Ch. 27710 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

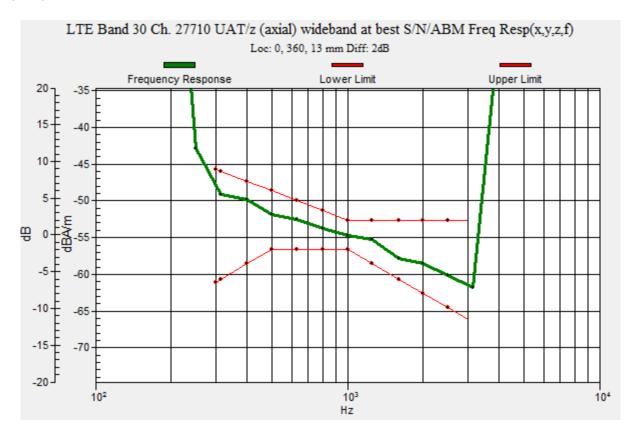
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 2.00 dB



LTE Band 30 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 30 Ch. 27710 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/22/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k voice 1kHz 1s.wav

Output Gain: 100

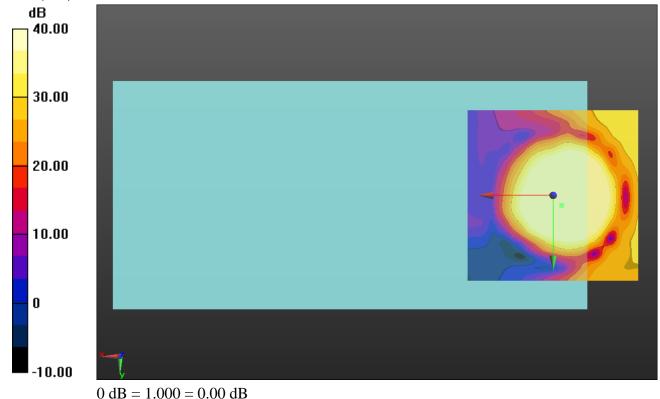
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.64 dBABM1 comp = 9.82 dBA/m BWC Factor = 0.16 dB Location: -2.5, 2.9, 3.7 mm



LTE Band 30 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 30 Ch. 27710 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

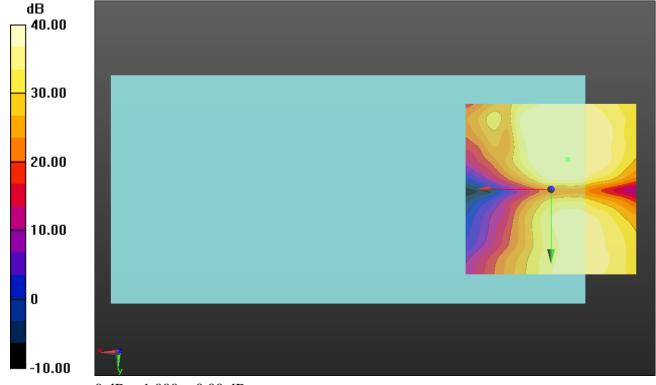
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 43.50 dB ABM1 comp = 1.19 dBA/m BWC Factor = 0.16 dB Location: -5, -8.8, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/22/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 41 Narrow Band

Communication System: UID 0, LTE (TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.59956

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 41 Ch. 40620 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

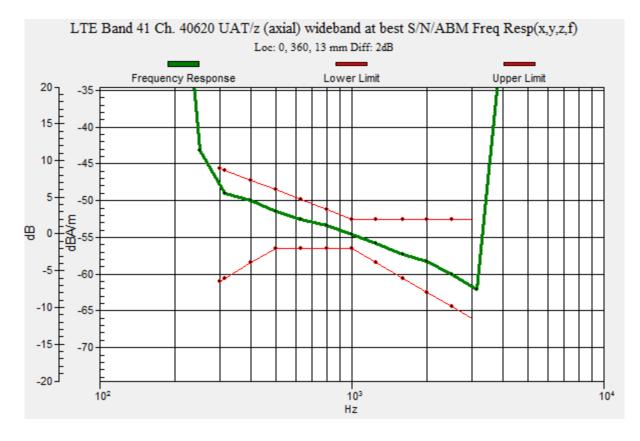
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 2.00 dB



LTE Band 41 Narrow Band

Communication System: UID 0, LTE (TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.59956

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 41 Ch. 40620 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/21/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

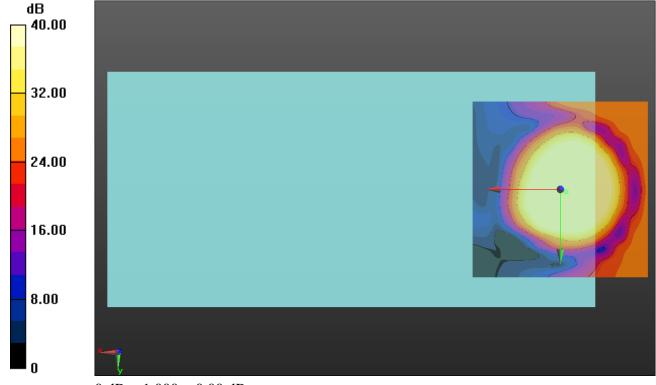
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.58 dB ABM1 comp = 10.24 dBA/m BWC Factor = 0.16 dB Location: -1.7, 0.8, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 41 Narrow Band

Communication System: UID 0, LTE (TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.59956

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 41 Ch. 40620 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

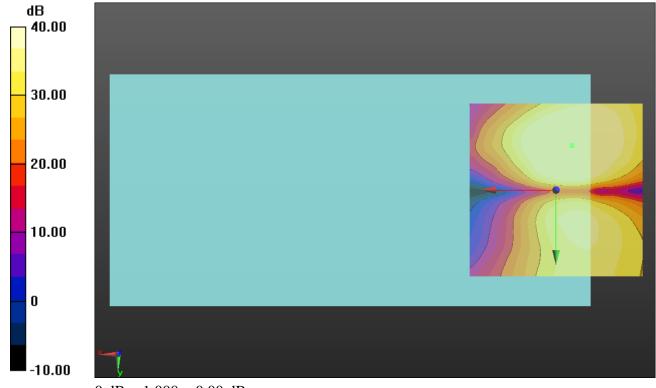
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.70 dB ABM1 comp = -1.15 dBA/m BWC Factor = 0.16 dB Location: -4.6, -12.9, 3.7 mm



Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/22/2017

LTE Band 66 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 66 Ch. 132322 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

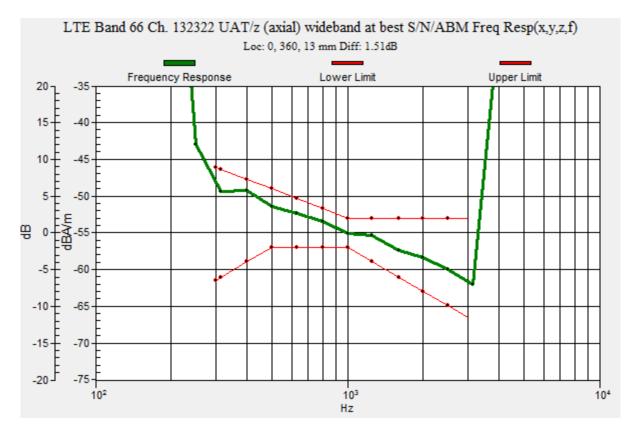
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.51 dB



LTE Band 66 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 66 Ch. 132322 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/22/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

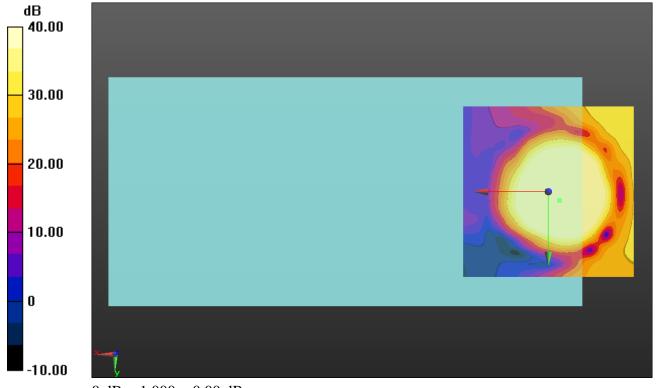
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.30 dB ABM1 comp = 9.75 dBA/m BWC Factor = 0.16 dB Location: -3.3, 2.5, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 66 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 66 Ch. 132322 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

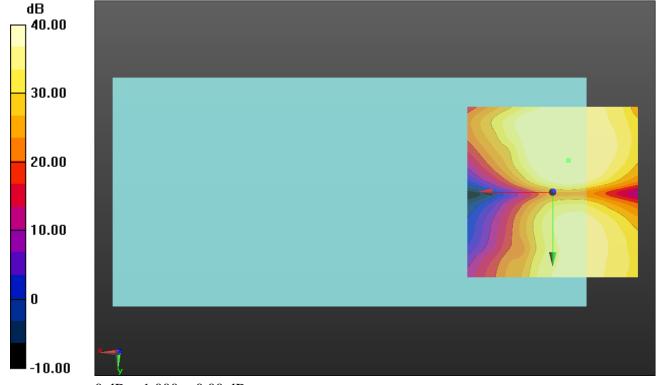
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 44.23 dB ABM1 comp = 1.24 dBA/m BWC Factor = 0.16 dB Location: -4.6, -9.2, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/22/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/20/2017

LTE Band 2 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 2 Ch. 18900 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

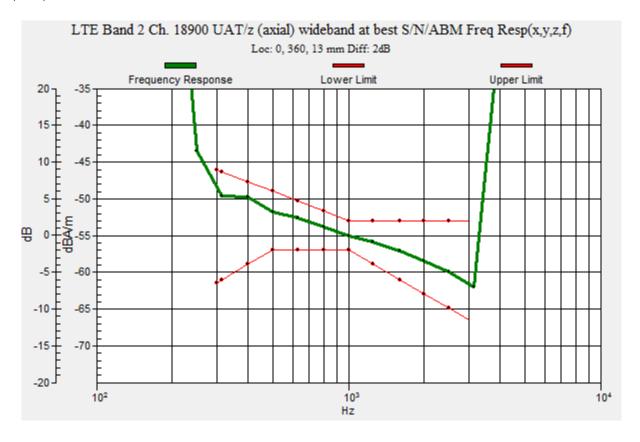
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 2.00 dB



Test Laboratory: UL Verification Services Inc., SAR Lab 2

LTE Band 2 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 2 Ch. 18900 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

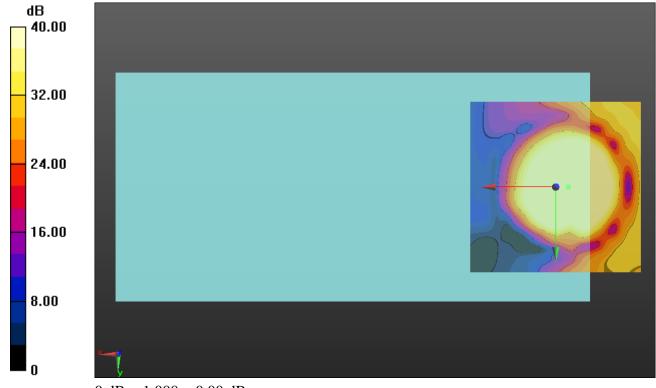
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.82 dB ABM1 comp = 10.90 dBA/m BWC Factor = 0.16 dB Location: -3.7, 0, 3.7 mm



LTE Band 2 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 2 Ch. 18900 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

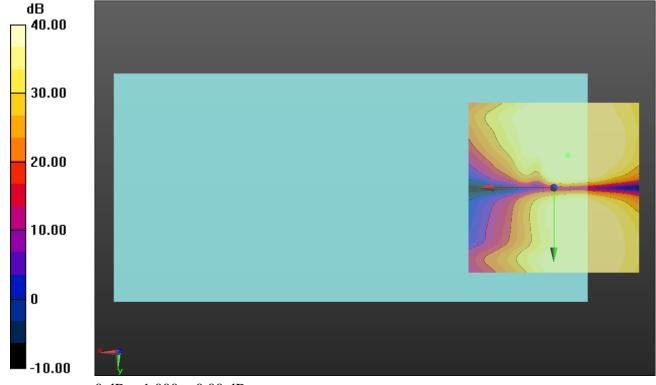
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 47.13 dB ABM1 comp = 2.29 dBA/m BWC Factor = 0.16 dB Location: -4.2, -9.6, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/20/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/20/2017

LTE Band 4 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 4 Ch. 20175 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

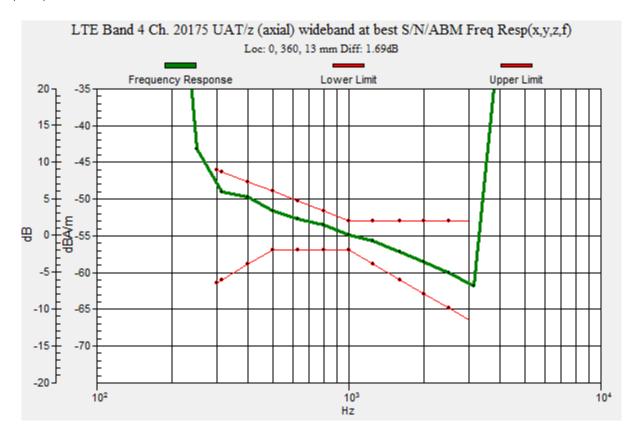
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.69 dB



LTE Band 4 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 4 Ch. 20175 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.33 dB ABM1 comp = 9.69 dBA/m BWC Factor = 0.16 dB Location: -2.9, 1.7, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 4 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 4 Ch. 20175 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

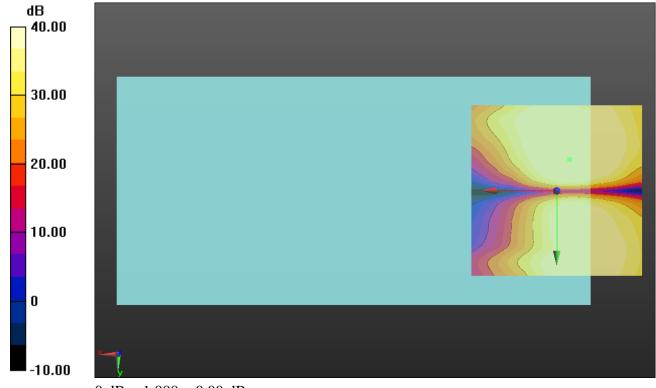
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 46.20 dB ABM1 comp = 1.78 dBA/m BWC Factor = 0.16 dB Location: -3.7, -9.2, 3.7 mm



Date: 4/20/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/20/2017

LTE Band 5 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 5 Ch. 20525 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

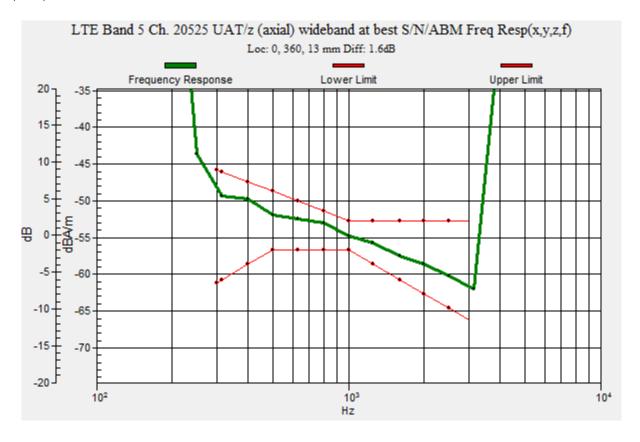
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.60 dB



LTE Band 5 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 5 Ch. 20525 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.63 dB ABM1 comp = 9.52 dBA/m BWC Factor = 0.16 dB Location: -3.7, 0.4, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 5 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 5 Ch. 20525 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 46.68 dB ABM1 comp = 1.89 dBA/m BWC Factor = 0.16 dB Location: -4.2, -9.6, 3.7 mm



Date: 4/20/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/20/2017

LTE Band 7 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 7 Ch. 21100 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

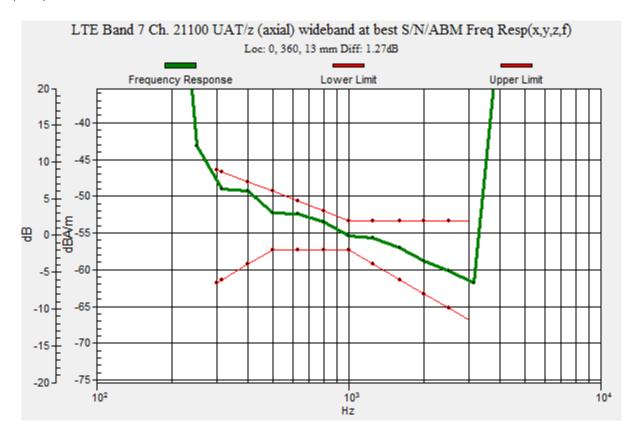
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.27 dB



Test Laboratory: UL Verification Services Inc., SAR Lab 2

LTE Band 7 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 7 Ch. 21100 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

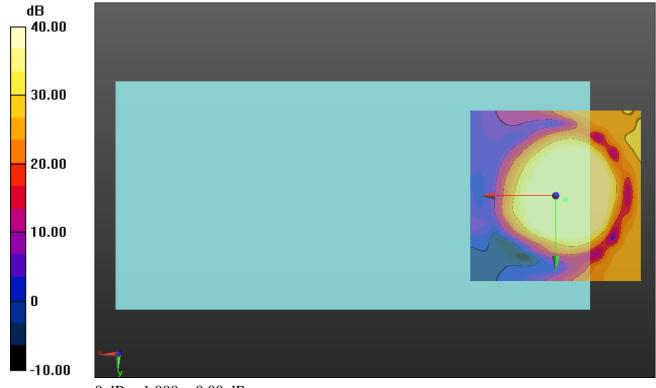
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 53.56 dB ABM1 comp = 9.32 dBA/m BWC Factor = 0.16 dB Location: -2.9, 1.2, 3.7 mm



LTE Band 7 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 7 Ch. 21100 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

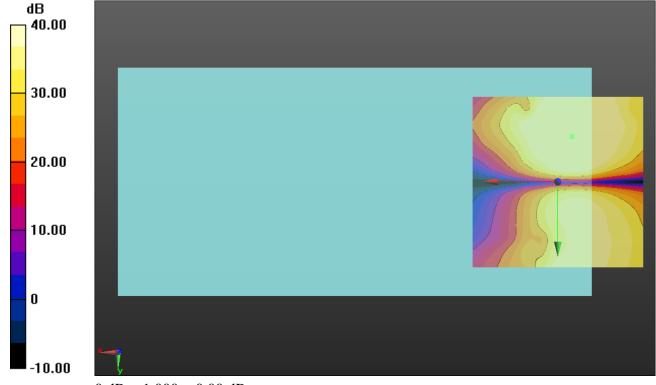
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.92 dB ABM1 comp = -0.62 dBA/m BWC Factor = 0.16 dB Location: -4.2, -13.3, 3.7 mm



Date: 4/20/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/20/2017

LTE Band 12 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 12 Ch. 23095 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

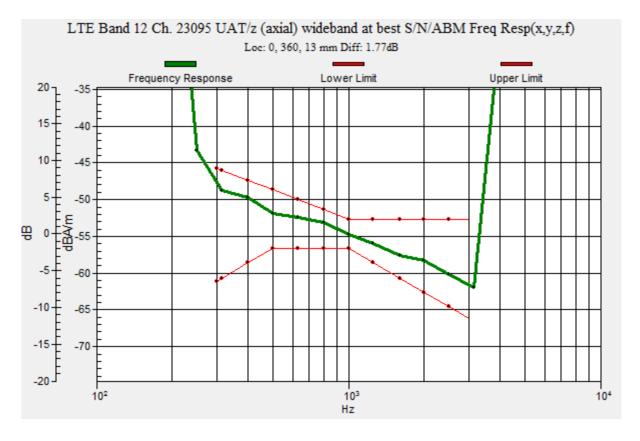
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.77 dB



LTE Band 12 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 12 Ch. 23095 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/20/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

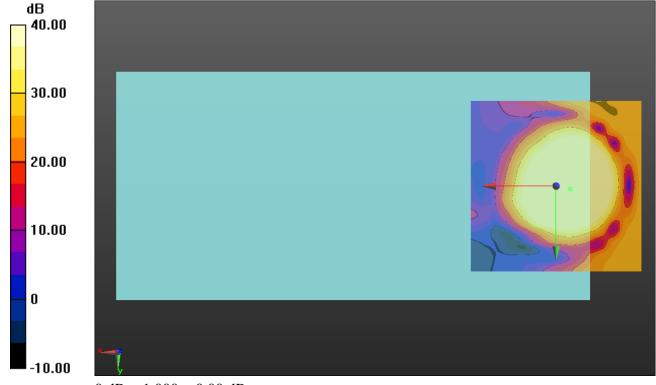
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.38 dB ABM1 comp = 8.65 dBA/m BWC Factor = 0.16 dB Location: -4.2, 0.8, 3.7 mm



LTE Band 12 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 12 Ch. 23095 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

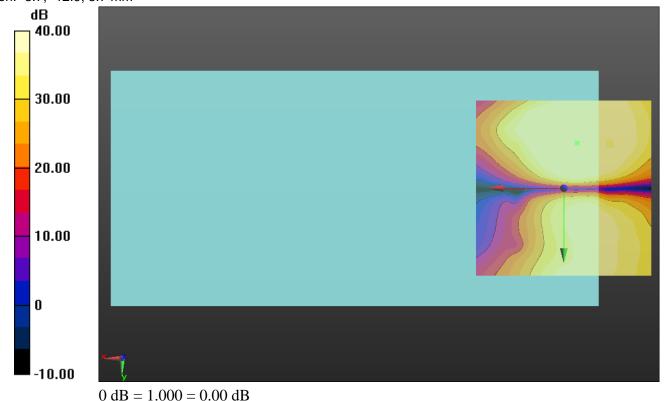
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 47.47 dB ABM1 comp = -0.41 dBA/m BWC Factor = 0.16 dB Location: -3.7, -12.9, 3.7 mm



Date: 4/20/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/20/2017

LTE Band 13 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 782 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 13 Ch. 23230 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

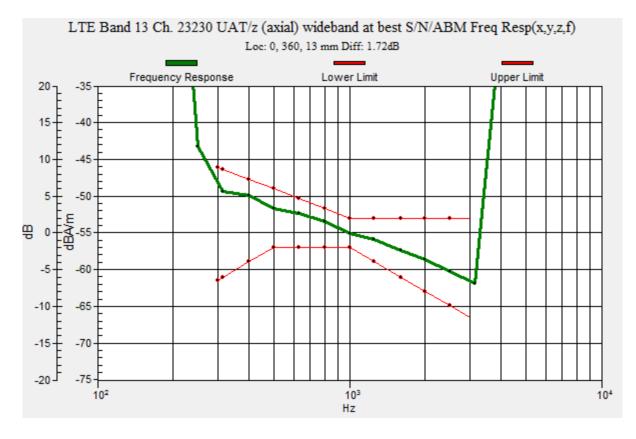
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.72 dB



LTE Band 13 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 782 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 13 Ch. 23230 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/20/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

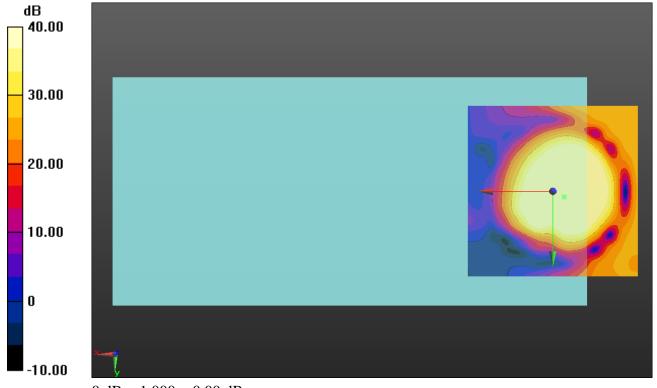
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 53.47 dB ABM1 comp = 8.91 dBA/m BWC Factor = 0.16 dB Location: -3.3, 1.7, 3.7 mm



LTE Band 13 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 782 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 13 Ch. 23230 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

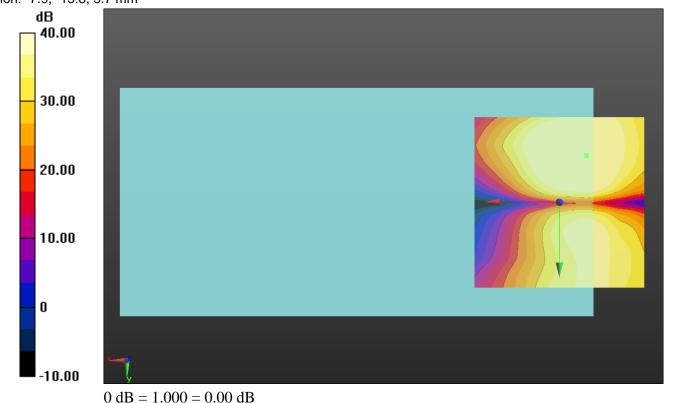
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.76 dB ABM1 comp = -1.54 dBA/m BWC Factor = 0.16 dB Location: -7.9, -13.8, 3.7 mm



Date: 4/20/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/20/2017

LTE Band 17 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 710 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 17 Ch. 23790 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

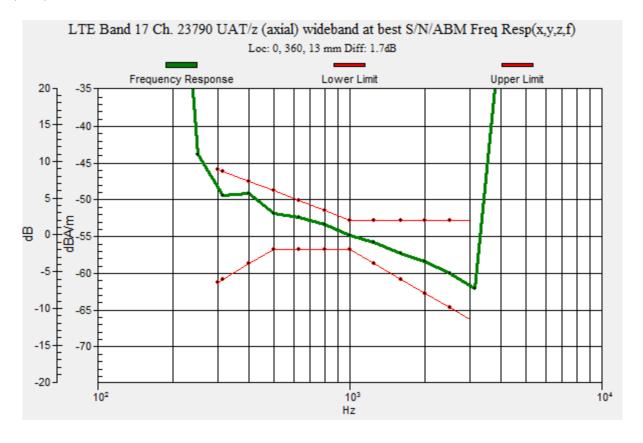
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.70 dB



LTE Band 17 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 710 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 17 Ch. 23790 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/20/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

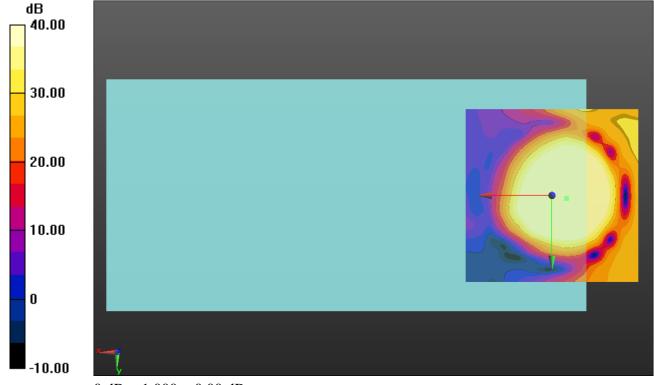
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.55 dB ABM1 comp = 9.64 dBA/m BWC Factor = 0.16 dB Location: -4.2, 0.8, 3.7 mm



LTE Band 17 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 710 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 17 Ch. 23790 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k voice 1kHz 1s.wav

Output Gain: 100

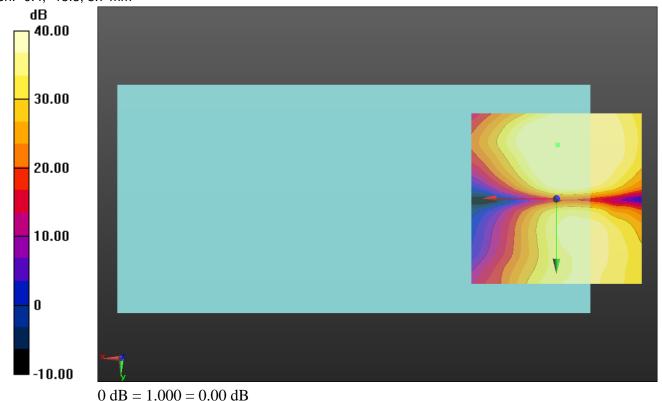
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 46.11 dB ABM1 comp = -0.99 dBA/m BWC Factor = 0.16 dB Location: -0.4, -15.8, 3.7 mm



Date: 4/20/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/20/2017

LTE Band 25 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 25 Ch. 26365 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

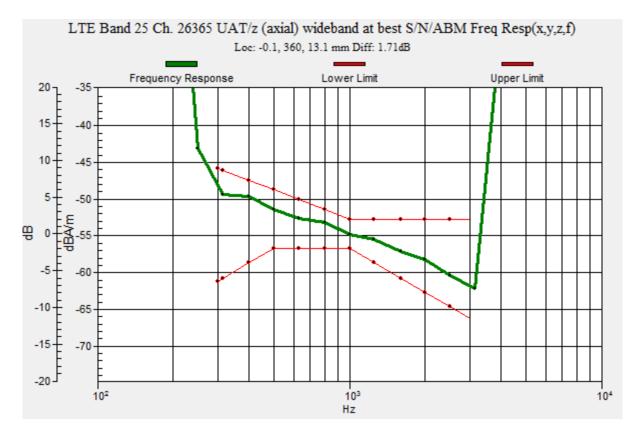
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.71 dB



LTE Band 25 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 25 Ch. 26365 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/20/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

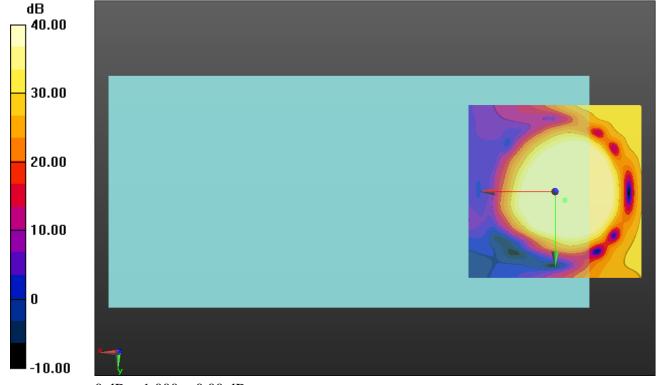
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.46 dB ABM1 comp = 9.61 dBA/m BWC Factor = 0.16 dB Location: -2.9, 2.5, 3.7 mm



LTE Band 25 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 25 Ch. 26365 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

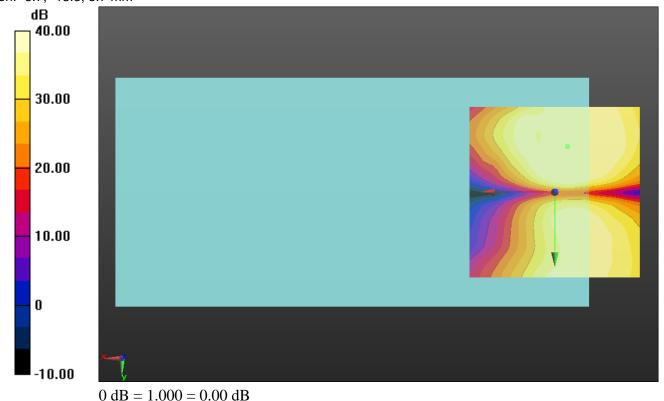
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 46.88 dB ABM1 comp = -0.04 dBA/m BWC Factor = 0.16 dB Location: -3.7, -13.3, 3.7 mm



Date: 4/20/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 26 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 26 Ch. 26865 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

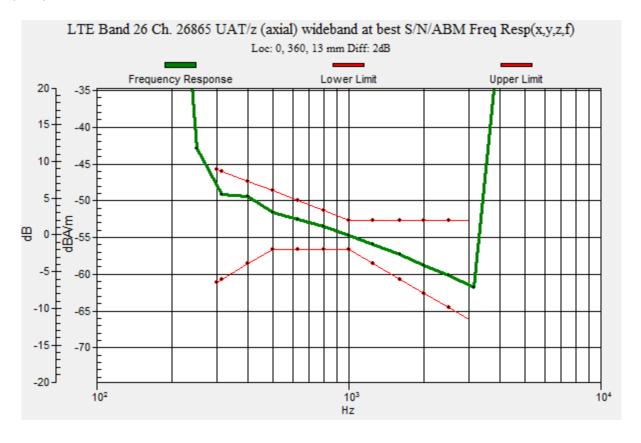
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 2.00 dB



LTE Band 26 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 26 Ch. 26865 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/20/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

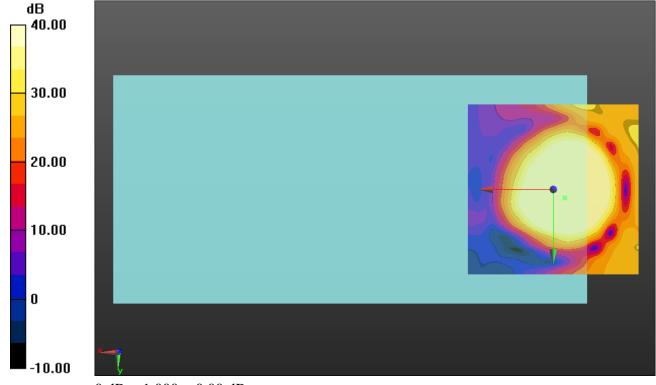
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.38 dB ABM1 comp = 10.18 dBA/m BWC Factor = 0.16 dB Location: -3.3, 2.5, 3.7 mm



LTE Band 26 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 26 Ch. 26865 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

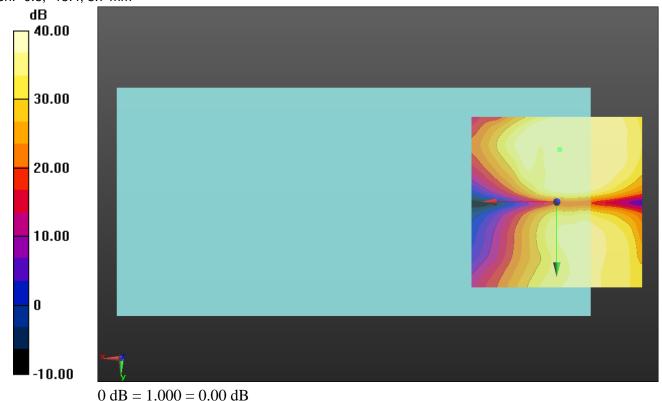
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 46.36 dB ABM1 comp = -1.11 dBA/m BWC Factor = 0.16 dB Location: -0.8, -15.4, 3.7 mm



Date: 4/20/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 30 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2310 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 30 Ch. 27710 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

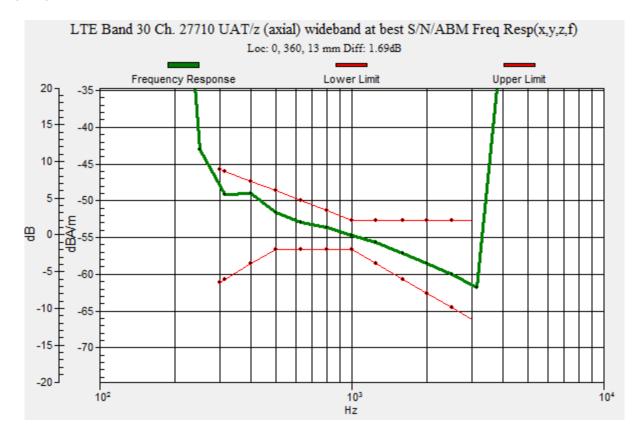
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.69 dB



LTE Band 30 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 30 Ch. 27710 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/21/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

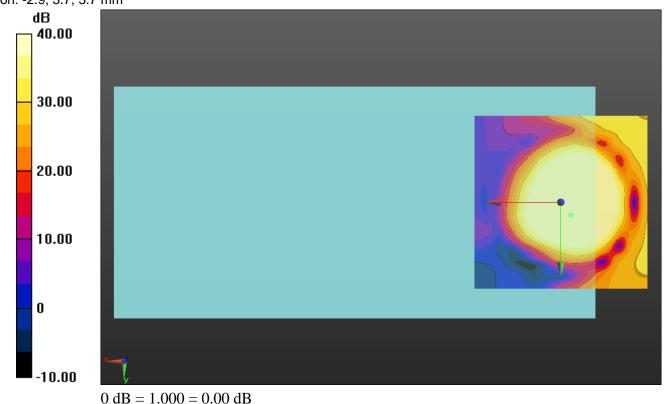
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.91 dB ABM1 comp = 9.71 dBA/m BWC Factor = 0.16 dB Location: -2.9, 3.7, 3.7 mm



LTE Band 30 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 30 Ch. 27710 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k voice 1kHz 1s.wav

Output Gain: 100

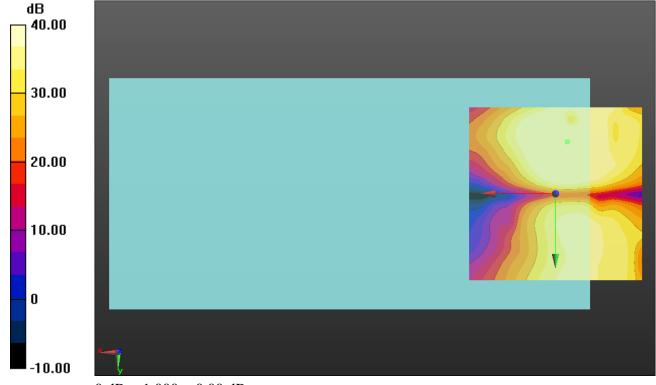
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.84 dB ABM1 comp = -1.16 dBA/m BWC Factor = 0.16 dB Location: -3.3, -15, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 41 Wide Band

Communication System: UID 0, LTE (TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.59956

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 41 Ch. 40620 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

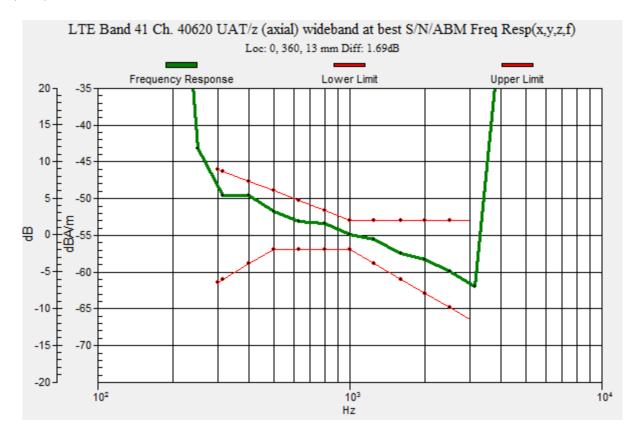
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.69 dB



LTE Band 41 Wide Band

Communication System: UID 0, LTE (TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.59956

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 41 Ch. 40620 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/21/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

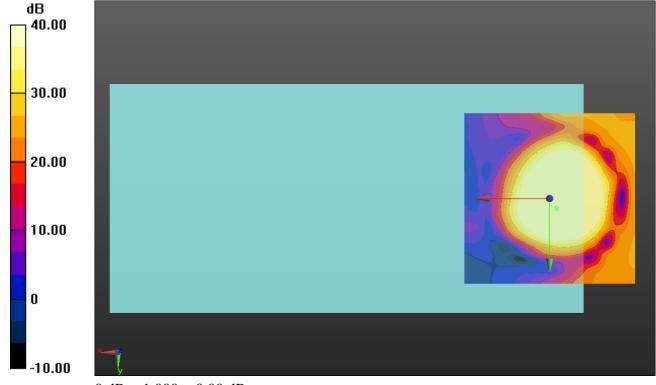
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.91 dB ABM1 comp = 10.72 dBA/m BWC Factor = 0.16 dB Location: -2.1, 2.9, 3.7 mm



LTE Band 41 Wide Band

Communication System: UID 0, LTE (TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.59956

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 41 Ch. 40620 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.07 dB ABM1 comp = -0.97 dBA/m BWC Factor = 0.16 dB Location: -0.8, -15.4, 3.7 mm



Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 66 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 66 Ch. 132322 UAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

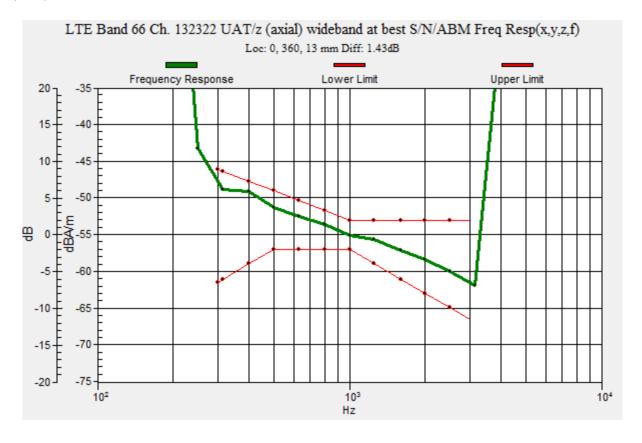
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.43 dB



LTE Band 66 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 66 Ch. 132322 UAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/21/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

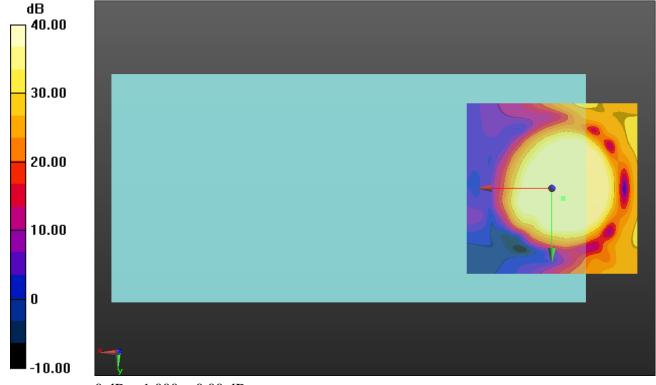
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.82 dB ABM1 comp = 10.24 dBA/m BWC Factor = 0.16 dB Location: -3.3, 2.9, 3.7 mm



LTE Band 66 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 66 Ch. 132322 UAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.56 dB ABM1 comp = 2.60 dBA/m BWC Factor = 0.16 dB Location: -4.2, -9.6, 3.7 mm



Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2

GSM850

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 1 slot) (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.00018

Date: 4/18/2017

T-Coil scan (scan for ANSI C63.19 2011 compliance)/GSM850 Ch 190 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

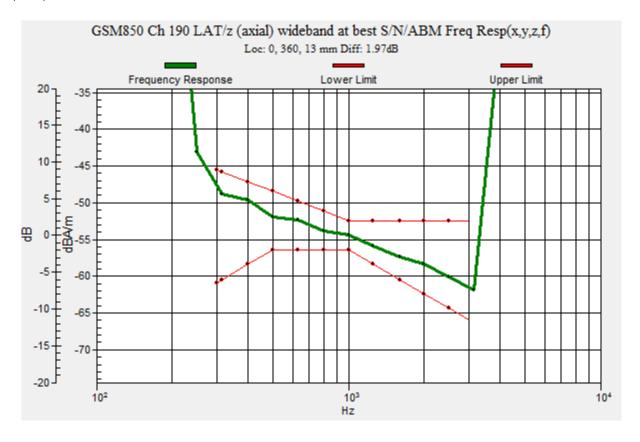
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.97 dB



GSM850

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 1 slot) (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.00018

Date: 4/18/2017

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/GSM850 Ch 190 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

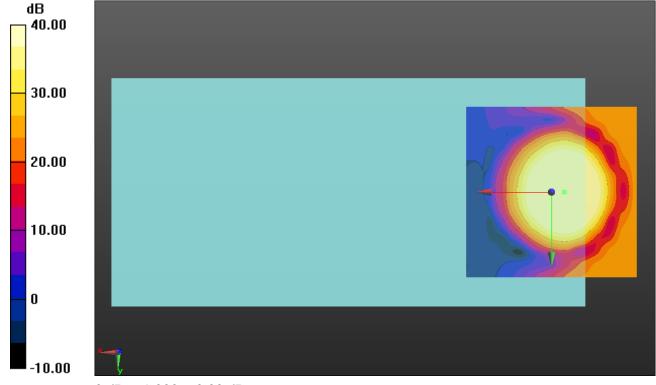
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 50.59 dB ABM1 comp = 8.87 dBA/m BWC Factor = 0.16 dB Location: -3.7, 0, 3.7 mm



GSM850

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 1 slot) (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.00018

Date: 4/18/2017

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/GSM850 Ch 190 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Signal Type: Audio File (.wav) 48k voice 1kHz 1s.wav

Output Gain: 100

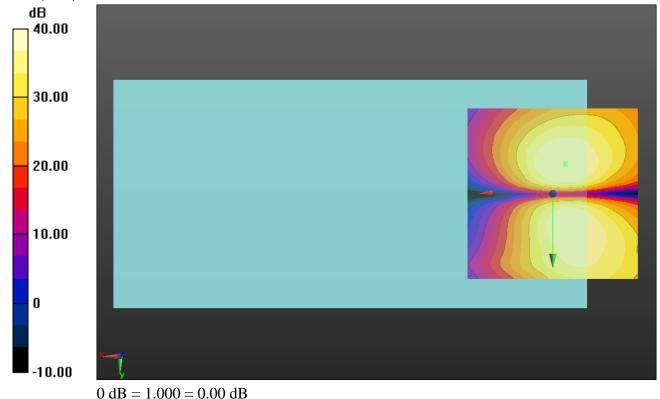
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 41.59 dBABM1 comp = 0.91 dBA/m BWC Factor = 0.16 dB Location: -3.7, -8.8, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/18/2017

GSM1900

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 1 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:8.00018

T-Coil scan (scan for ANSI C63.19 2011 compliance)/GSM1900 Ch 661 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

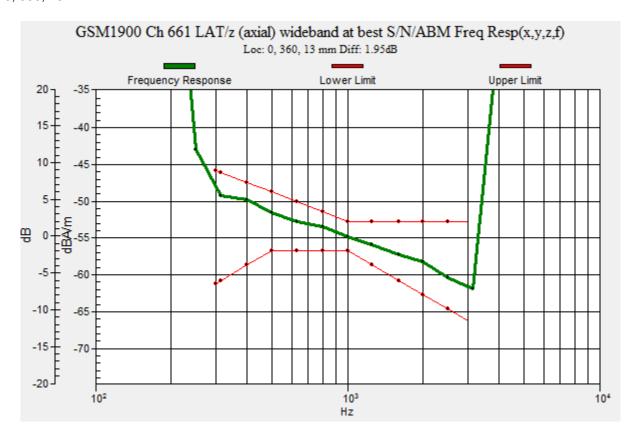
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.95 dB



GSM1900

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 1 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:8.00018

Date: 4/18/2017

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/GSM1900 Ch 661 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

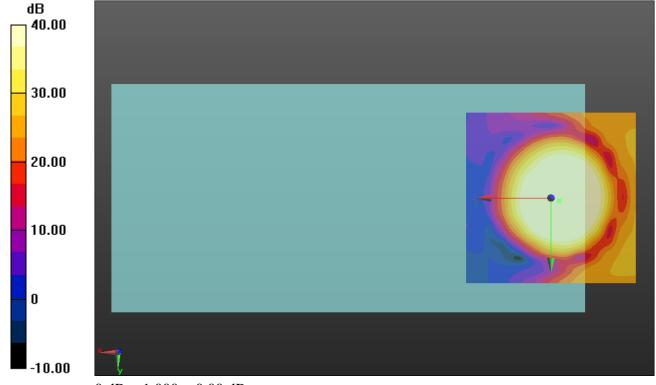
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 52.40 dB ABM1 comp = 9.62 dBA/m BWC Factor = 0.16 dB Location: -2.5, 0.8, 3.7 mm



GSM1900

Communication System: UID 0, GPRS-FDD (TDMA, GMSK, 1 slot) (0); Frequency: 1880 MHz; Duty Cycle: 1:8.00018

Date: 4/18/2017

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/GSM1900 Ch 661 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

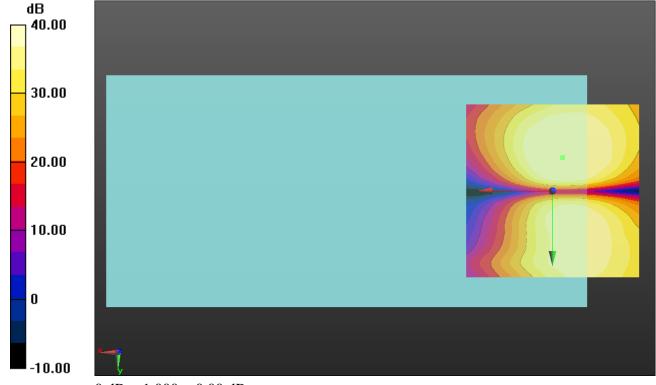
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 44.23 dB ABM1 comp = 1.00 dBA/m BWC Factor = 0.16 dB Location: -2.9, -9.6, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/19/2017

W-CDMA Band V

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band V Ch 4183 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

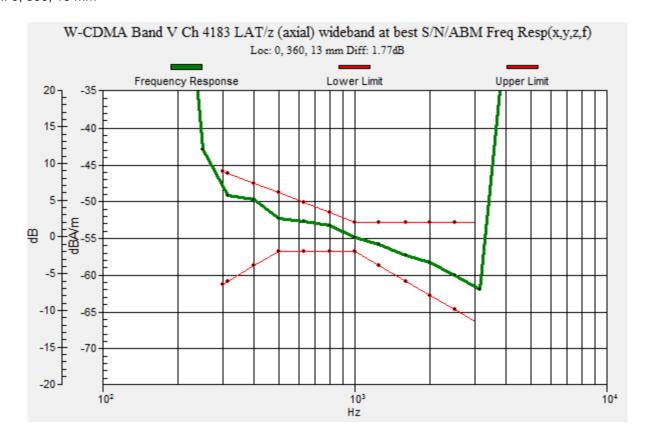
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.77 dB



W-CDMA Band V

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band V Ch 4183 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

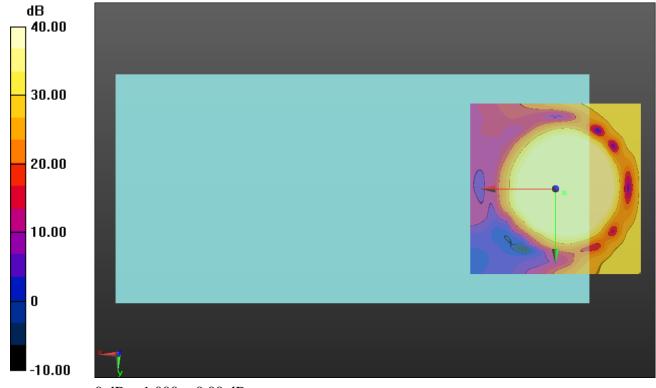
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 56.92 dB ABM1 comp = 9.80 dBA/m BWC Factor = 0.16 dB Location: -2.5, 1.2, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/19/2017

W-CDMA Band V

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band V Ch 4183 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

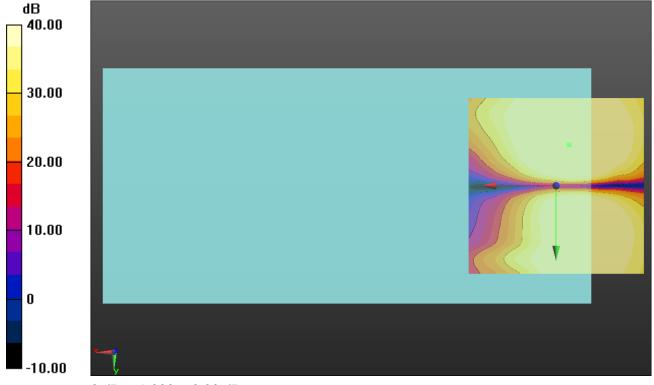
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 48.89 dB ABM1 comp = 0.36 dBA/m BWC Factor = 0.16 dB Location: -3.7, -11.7, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/19/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/19/2017

W-CDMA Band IV

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band IV Ch 1413 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

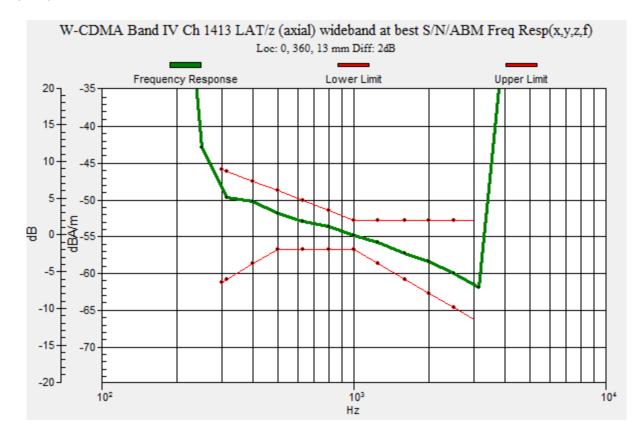
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 2.00 dB



W-CDMA Band IV

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band IV Ch 1413 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

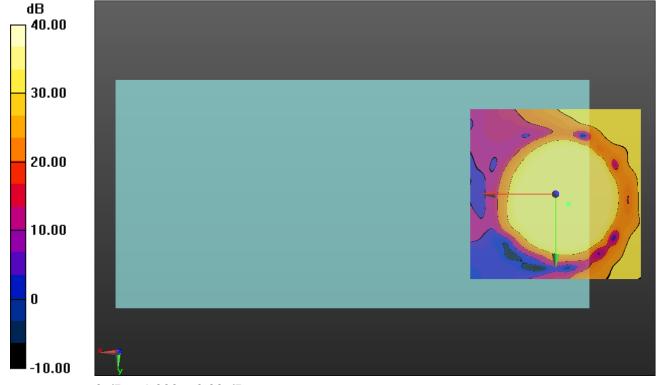
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 57.27 dB ABM1 comp = 8.67 dBA/m BWC Factor = 0.16 dB Location: -3.7, 2.9, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/19/2017

W-CDMA Band IV

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band IV Ch 1413 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

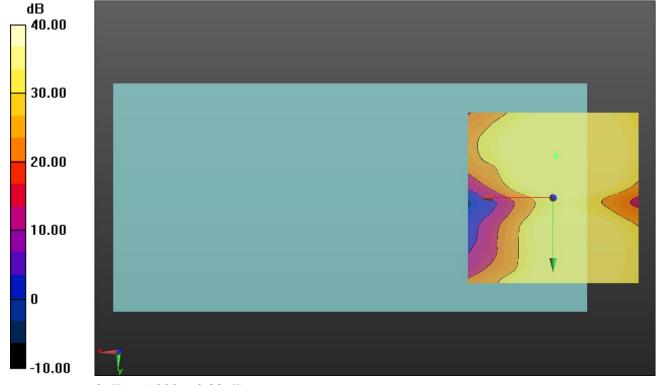
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 49.82 dB ABM1 comp = -0.35 dBA/m BWC Factor = 0.16 dB Location: -0.8, -12.1, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/19/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/19/2017

W-CDMA Band II

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band II Ch 9400 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

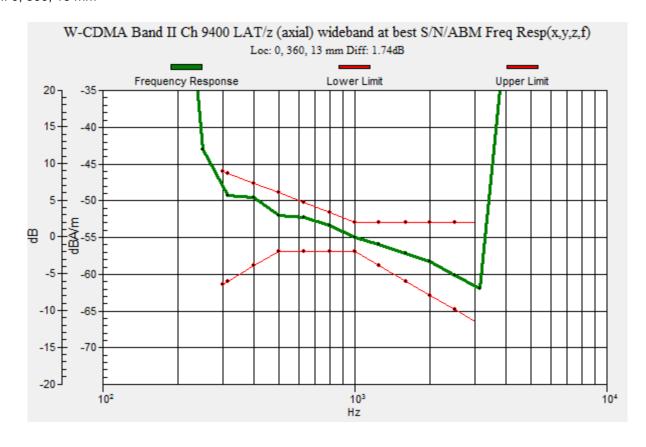
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.74 dB



W-CDMA Band II

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band II Ch 9400 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

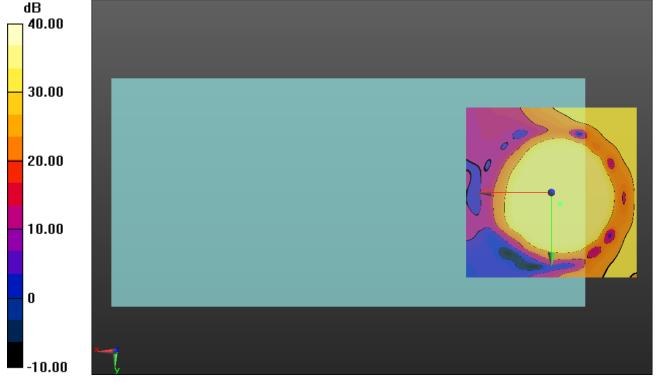
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 57.59 dB ABM1 comp = 9.53 dBA/m BWC Factor = 0.16 dB Location: -2.5, 3.3, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/19/2017

W-CDMA Band II

Communication System: UID 0, UMTS-FDD (WCDMA) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/W-CDMA Band II Ch 9400 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

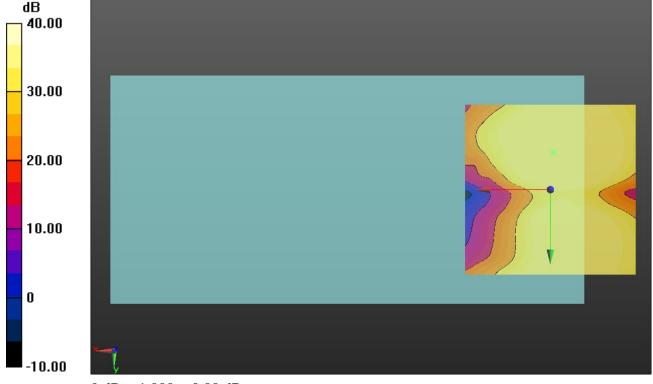
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 49.53 dB ABM1 comp = 0.73 dBA/m BWC Factor = 0.16 dB Location: -0.8, -10.8, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/19/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2

CDMA BC0

Communication System: UID 0, CDMA2000 (0); Frequency: 836.52 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC0 Ch 384 Eighth LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

Date: 4/17/2017

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

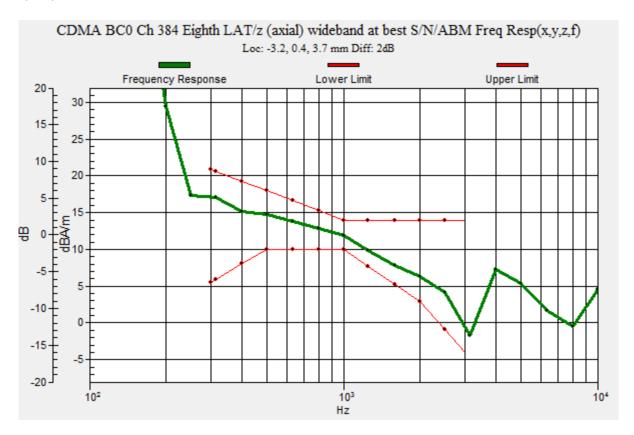
Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 2.00 dB

BWC Factor = 10.80 dB Location: -3.2, 0.4, 3.7 mm



CDMA BC0

Communication System: UID 0, CDMA2000 (0); Frequency: 836.52 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC0 Ch 384 Eighth LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

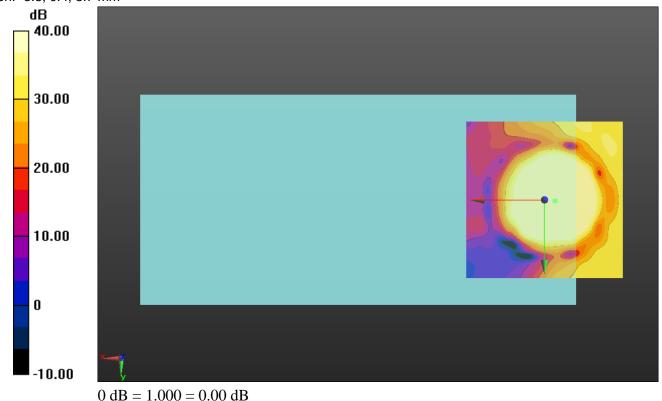
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 57.53 dB ABM1 comp = 10.89 dBA/m BWC Factor = 0.16 dB Location: -3.3, 0.4, 3.7 mm



Date: 4/17/2017

CDMA BC0

Communication System: UID 0, CDMA2000 (0); Frequency: 836.52 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC0 Ch 384 Eighth LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k voice 1kHz 1s.wav

Output Gain: 100

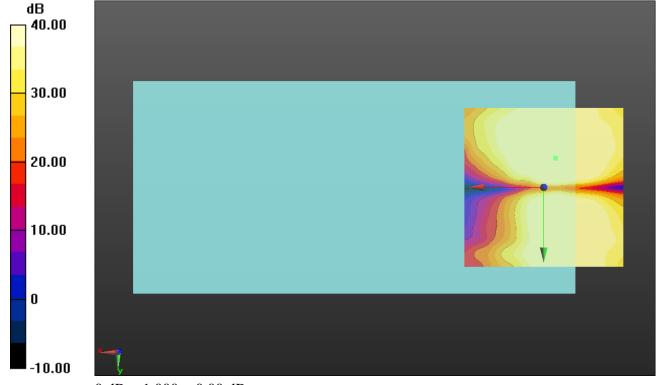
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 50.67 dB ABM1 comp = 3.05 dBA/m BWC Factor = 0.16 dB Location: -3.7, -9.2, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/17/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/17/2017

CDMA BC1

Communication System: UID 0, CDMA2000 (0); Frequency: 1880 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC1 Ch 600 Eighth LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

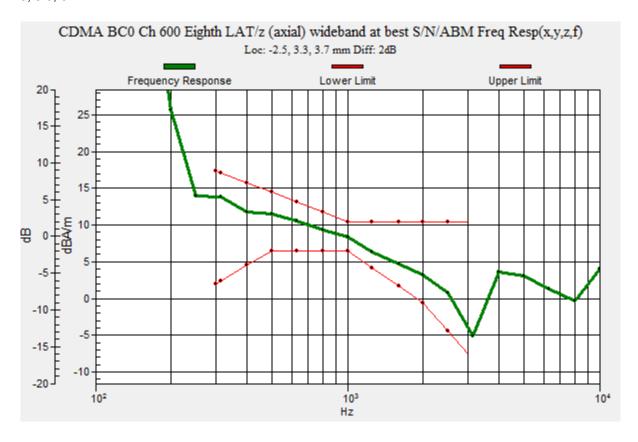
Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
56.09	> 30 dB
Category T4	> 50 db

Cursor:

Diff = 2.00 dB

BWC Factor = 10.80 dB Location: -2.5, 3.3, 3.7 mm



CDMA BC1

Communication System: UID 0, CDMA2000 (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC1 Ch 600 Eighth LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

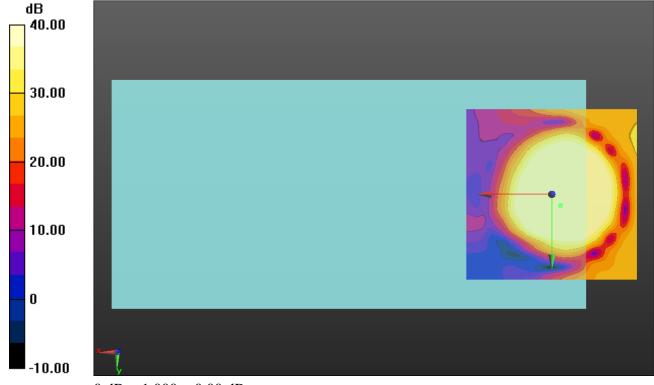
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 56.09 dB ABM1 comp = 7.75 dBA/m BWC Factor = 0.16 dB Location: -2.5, 3.3, 3.7 mm



Date: 4/17/2017

CDMA BC1

Communication System: UID 0, CDMA2000 (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC1 Ch 600 Eighth LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

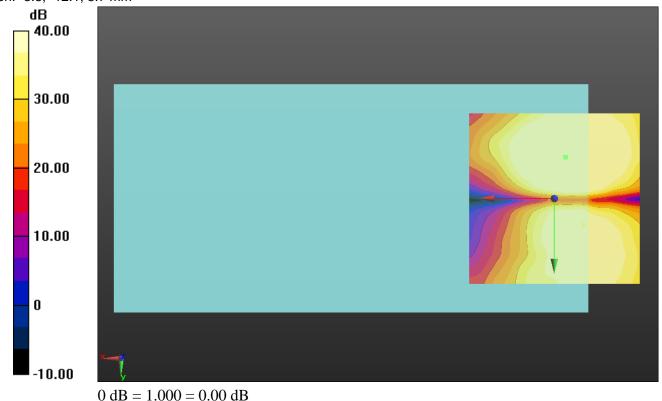
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 49.74 dB ABM1 comp = -0.28 dBA/m BWC Factor = 0.16 dB Location: -3.3, -12.1, 3.7 mm



Date: 4/17/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/18/2017

CDMA BC10

Communication System: UID 0, CDMA2000 (0); Frequency: 820.5 MHz;Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC10 Ch 580 Eighth LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

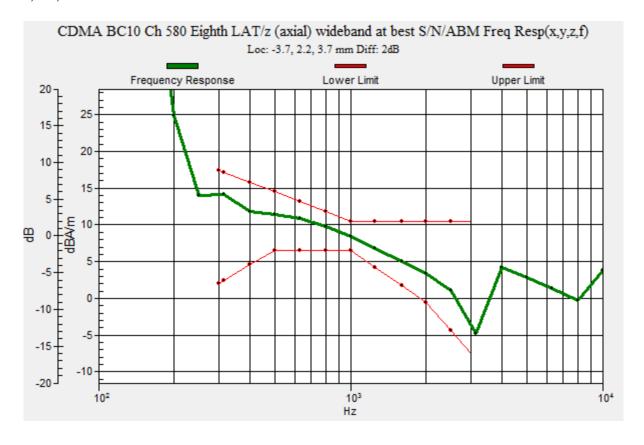
Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 2.00 dB

BWC Factor = 10.80 dB Location: -3.7, 2.2, 3.7 mm



CDMA BC10

Communication System: UID 0, CDMA2000 (0); Frequency: 820.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC10 Ch 580 Eighth LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/18/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

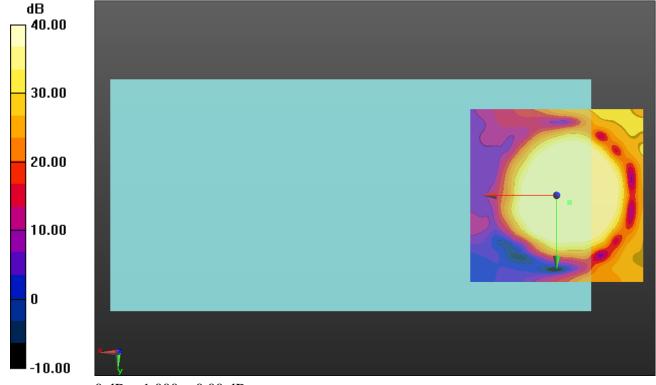
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 56.66 dB ABM1 comp = 8.23 dBA/m BWC Factor = 0.16 dB Location: -3.7, 2.1, 3.7 mm



CDMA BC10

Communication System: UID 0, CDMA2000 (0); Frequency: 820.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/CDMA BC10 Ch 580 Eighth LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

Date: 4/18/2017

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

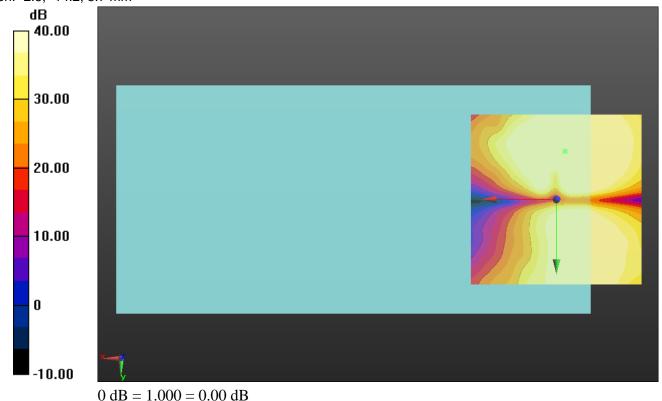
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 48.92 dB ABM1 comp = -2.00 dBA/m BWC Factor = 0.16 dB Location: -2.5, -14.2, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 2 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/QPSK Ch 20525 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

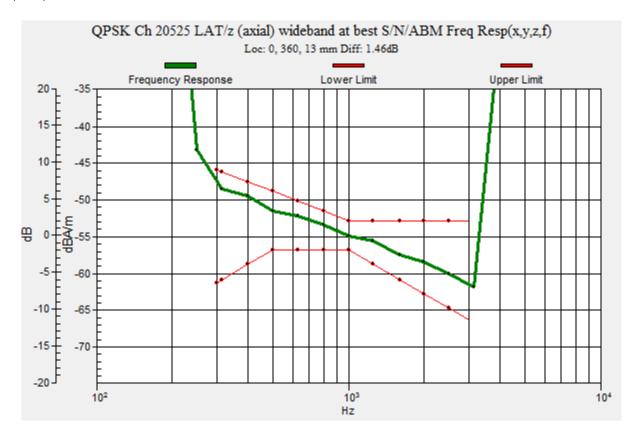
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.46 dB



LTE Band 2 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/QPSK Ch 20525 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/21/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

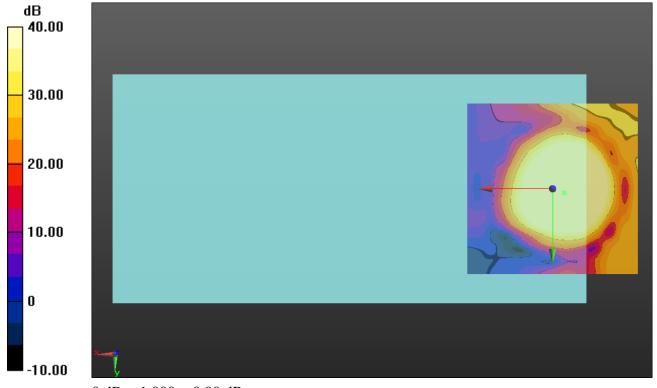
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.55 dB ABM1 comp = 9.79 dBA/m BWC Factor = 0.16 dB Location: -3.3, 1.2, 3.7 mm



LTE Band 2 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/QPSK Ch 20525 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/21/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

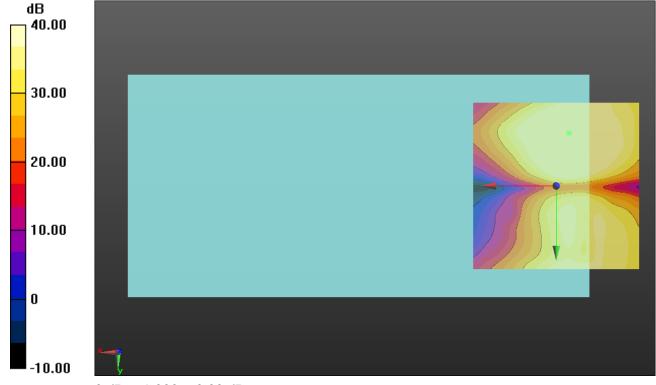
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 46.08 dB ABM1 comp = -3.34 dBA/m BWC Factor = 0.16 dB Location: -3.7, -15.8, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 4 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 4 Ch 20175 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

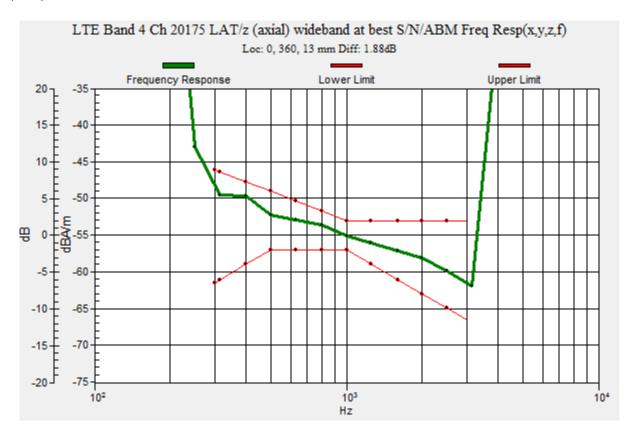
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.88 dB



LTE Band 4 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 4 Ch 20175 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/21/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

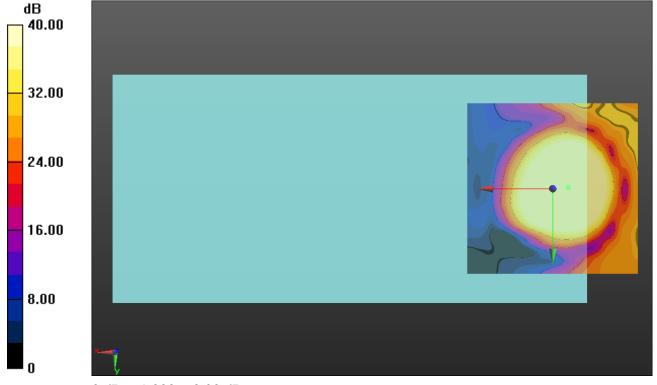
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 53.86 dB ABM1 comp = 8.81 dBA/m BWC Factor = 0.16 dB Location: -4.6, -0.4, 3.7 mm



LTE Band 4 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 4 Ch 20175 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

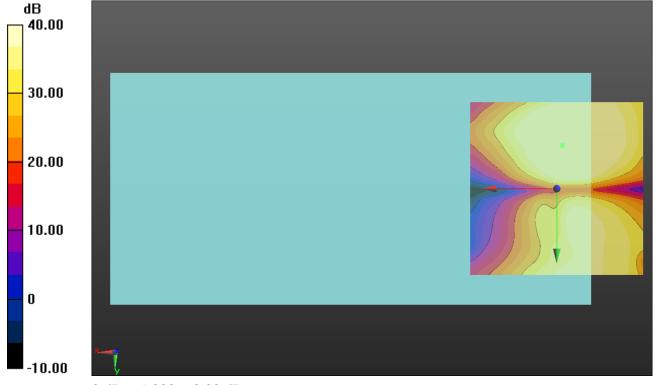
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 46.05 dB ABM1 comp = -0.12 dBA/m BWC Factor = 0.16 dB Location: -1.7, -12.5, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/20/2017

LTE Band 5 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/QPSK Ch 20525 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

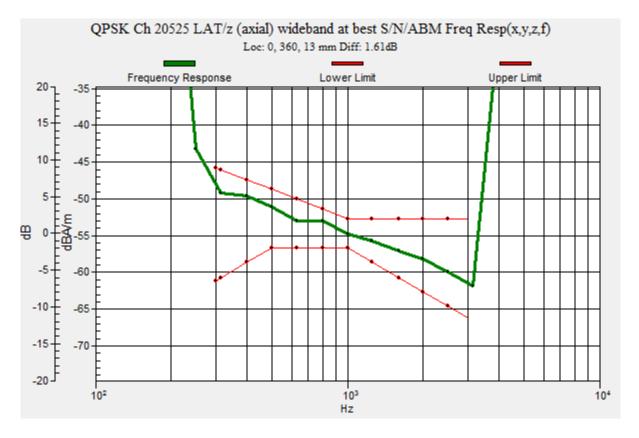
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.61 dB



LTE Band 5 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/QPSK Ch 20525 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

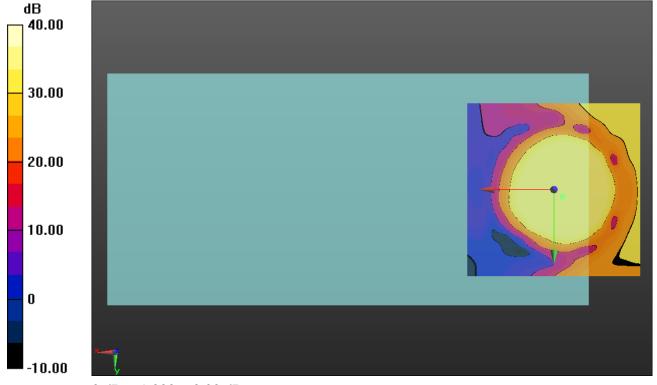
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.83 dB ABM1 comp = 9.83 dBA/m BWC Factor = 0.16 dB Location: -2.5, 2.1, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/20/2017

LTE Band 5 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/QPSK Ch 20525 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

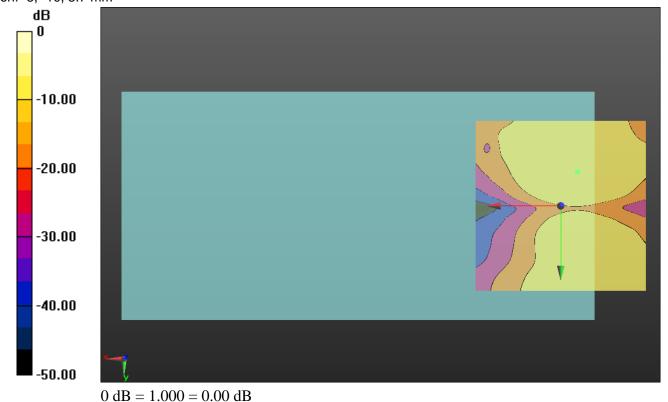
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.26 dB ABM1 comp = -0.36 dBA/m BWC Factor = 0.16 dB Location: -5, -10, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 7 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 7 Ch 21100 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

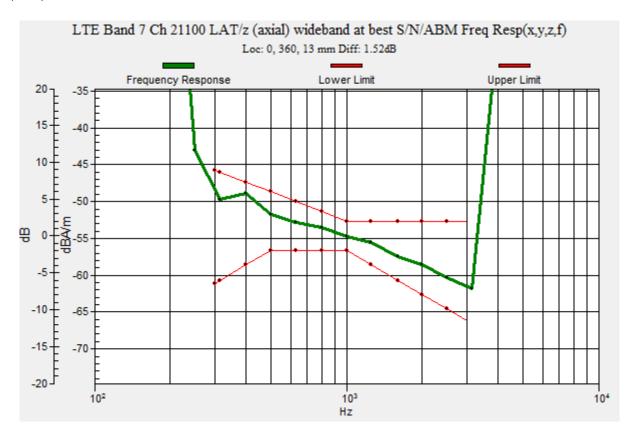
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.52 dB



LTE Band 7 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 7 Ch 21100 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/21/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

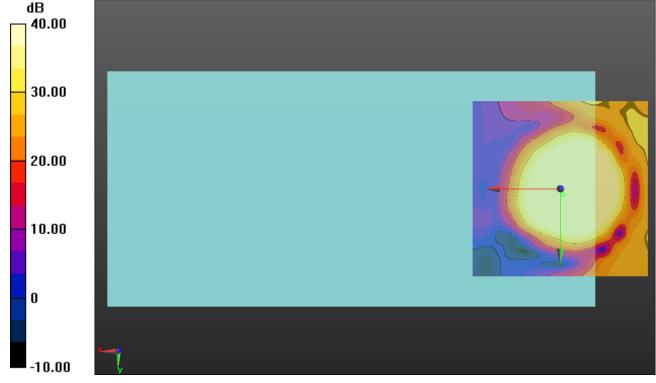
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 53.40 dB ABM1 comp = 10.38 dBA/m BWC Factor = 0.16 dB Location: -0.8, 1.7, 3.7 mm



LTE Band 7 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 7 Ch 21100 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

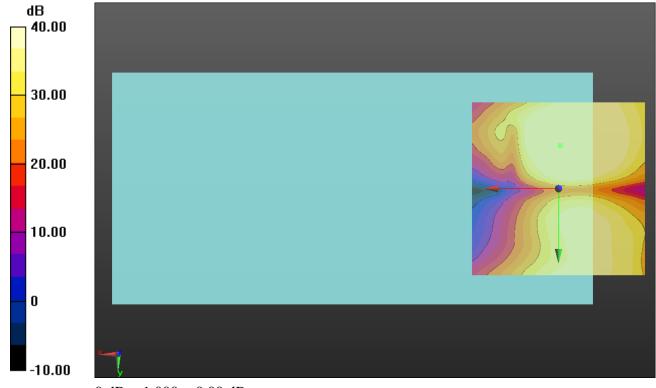
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.71 dB ABM1 comp = -0.04 dBA/m BWC Factor = 0.16 dB Location: -0.4, -12.5, 3.7 mm



Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 12 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 12 Ch 23095 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

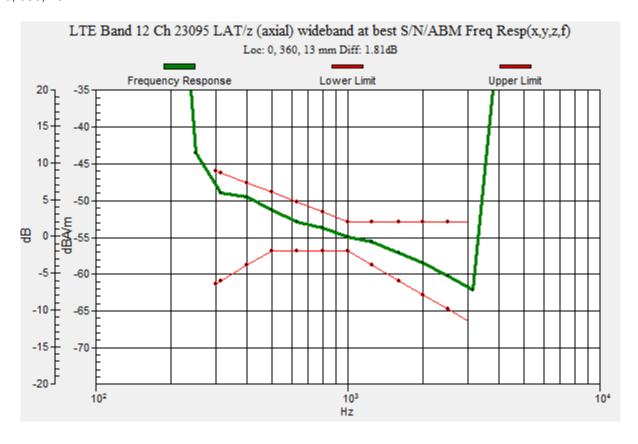
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.81 dB



LTE Band 12 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 12 Ch 23095 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/21/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

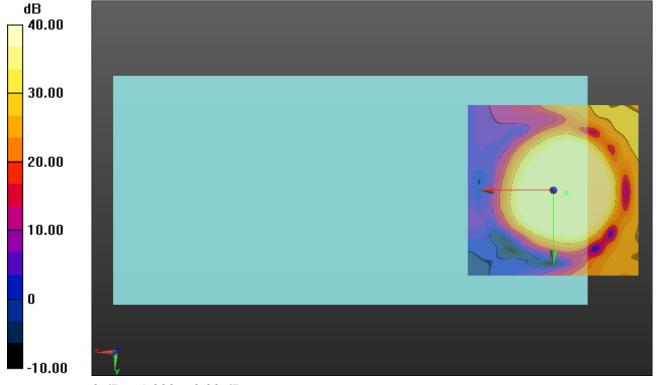
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.37 dB ABM1 comp = 9.35 dBA/m BWC Factor = 0.16 dB Location: -3.7, 0.8, 3.7 mm



LTE Band 12 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 12 Ch 23095 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

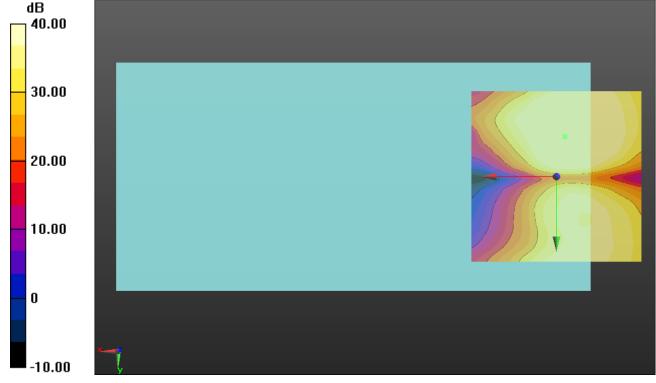
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 46.08 dB ABM1 comp = 0.13 dBA/m BWC Factor = 0.16 dB Location: -2.5, -11.7, 3.7 mm



Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 13 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 782 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 13 Ch 23230 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

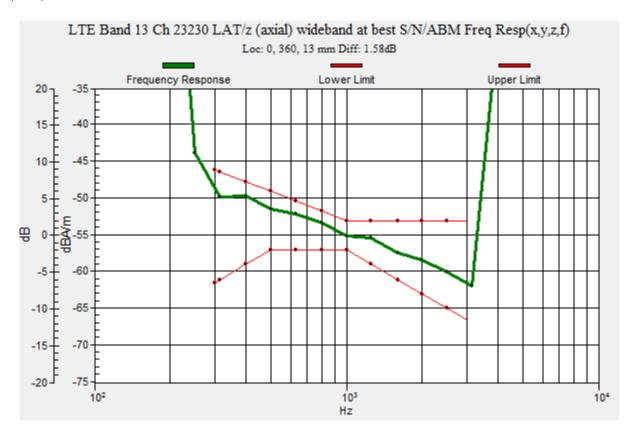
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.58 dB



LTE Band 13 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 782 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 13 Ch 23230 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/21/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

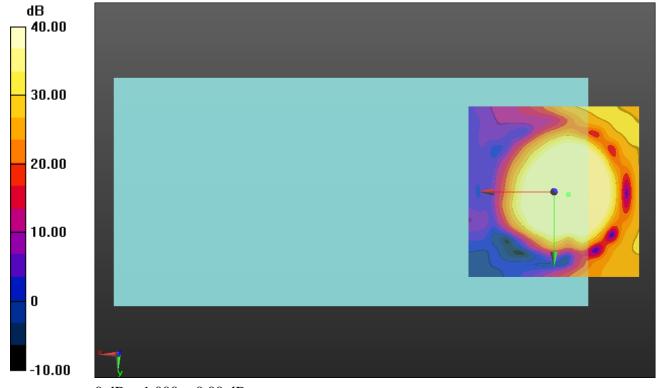
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.19 dB ABM1 comp = 9.29 dBA/m BWC Factor = 0.16 dB Location: -4.2, 0.8, 3.7 mm



LTE Band 13 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 782 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 13 Ch 23230 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

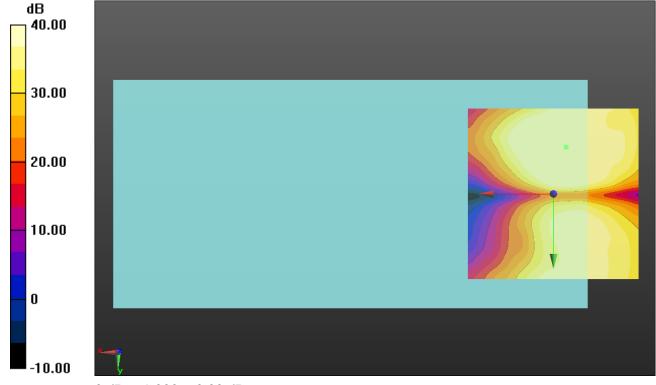
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 47.17 dB ABM1 comp = -0.99 dBA/m BWC Factor = 0.16 dB Location: -3.7, -13.8, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 17 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 710 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 17 Ch 23790 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

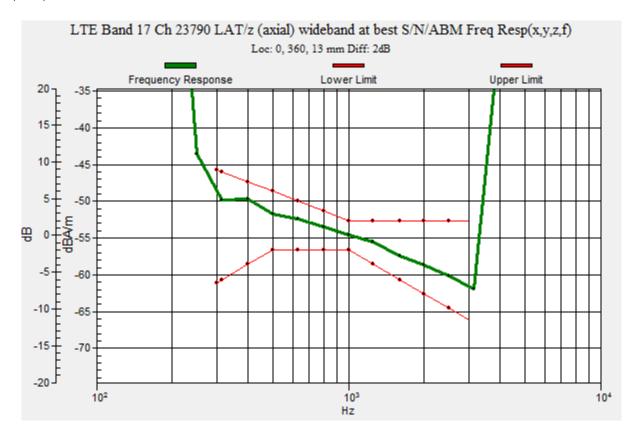
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 2.00 dB



LTE Band 17 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 710 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 17 Ch 23790 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/21/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

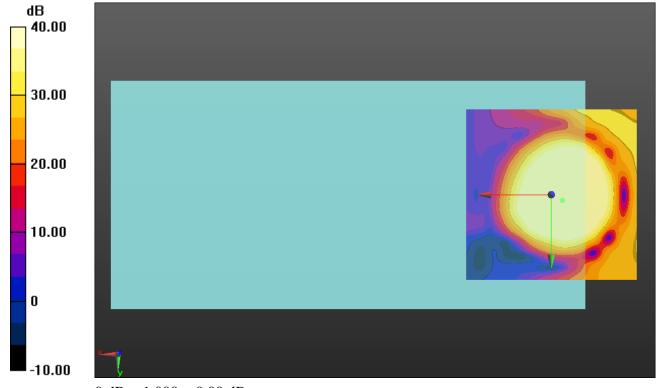
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.02 dB ABM1 comp = 9.56 dBA/m BWC Factor = 0.16 dB Location: -3.3, 1.7, 3.7 mm



LTE Band 17 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 710 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 17 Ch 23790 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

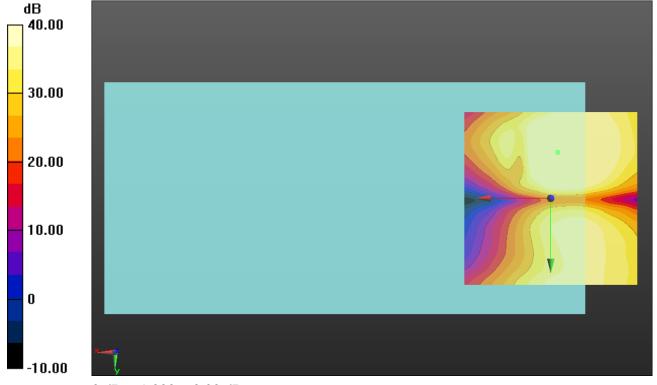
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.47 dB ABM1 comp = -0.70 dBA/m BWC Factor = 0.16 dB Location: -2.1, -13.3, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 25 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 25 Ch 26365 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

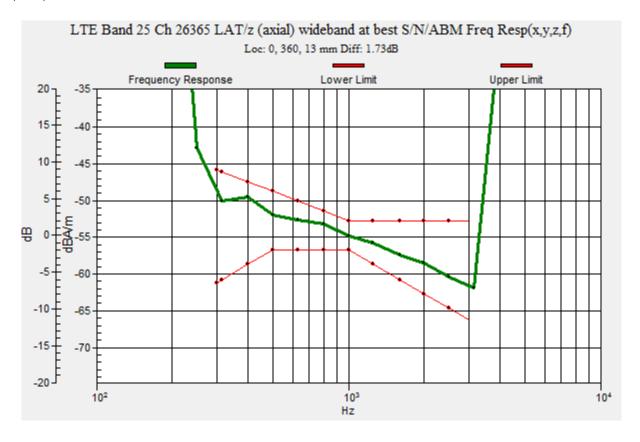
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.73 dB



LTE Band 25 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 25 Ch 26365 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/21/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

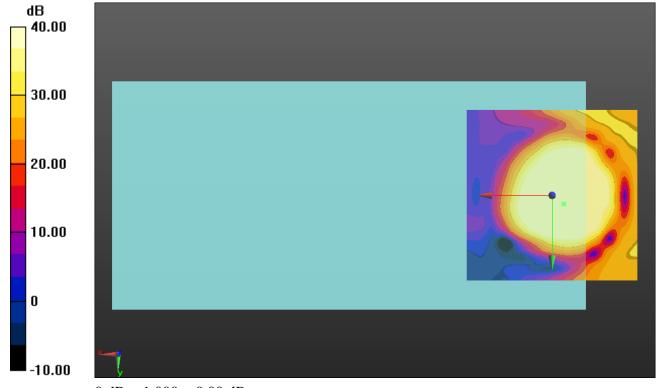
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.56 dB ABM1 comp = 10.00 dBA/m BWC Factor = 0.16 dB Location: -3.3, 2.5, 3.7 mm



LTE Band 25 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 25 Ch 26365 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

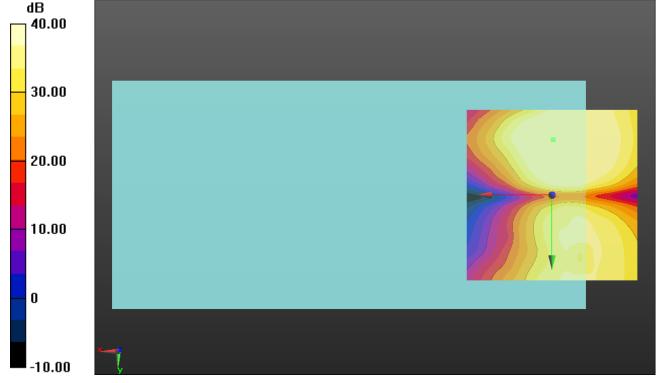
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.58 dB ABM1 comp = -2.33 dBA/m BWC Factor = 0.16 dB Location: -0.4, -16.3, 3.7 mm



0 dB = 1.000 = 0.00 dB

Date: 4/21/2017

Test Laboratory: UL Verification Services Inc., SAR Lab 2

LTE Band 26 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 26 Ch. 26865 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

Date: 4/21/2017

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

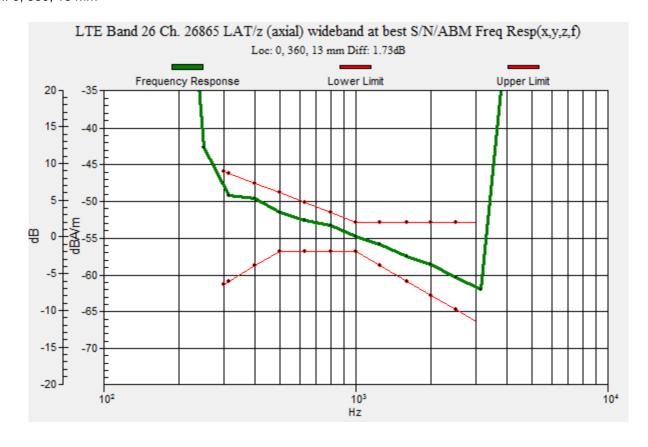
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.73 dB



LTE Band 26 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 26 Ch. 26865 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

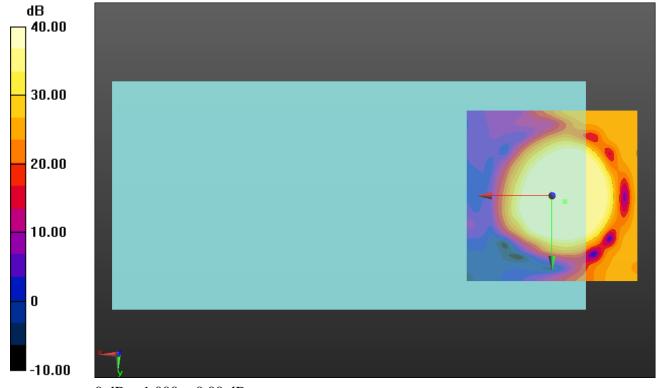
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.44 dB ABM1 comp = 9.49 dBA/m BWC Factor = 0.16 dB Location: -3.7, 1.7, 3.7 mm



LTE Band 26 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 26 Ch. 26865 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

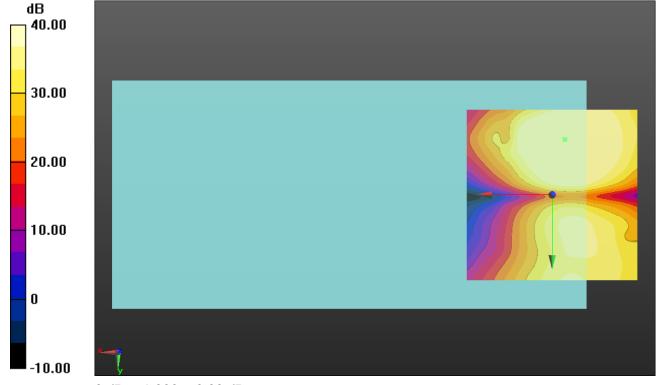
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.47 dB ABM1 comp = -3.17 dBA/m BWC Factor = 0.16 dB Location: -3.7, -16.3, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 30 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2310 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 30 Ch. 27710 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

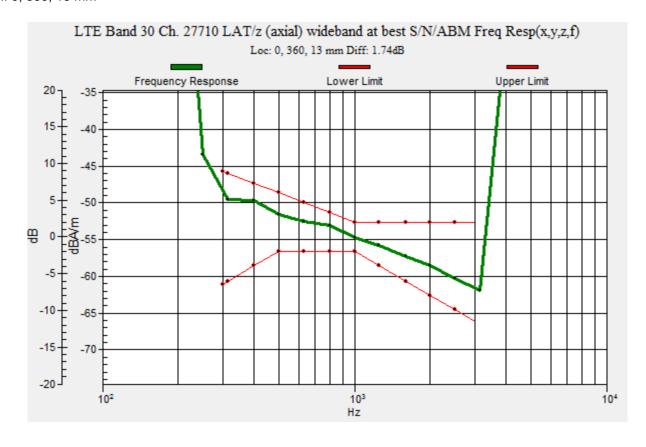
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.74 dB



LTE Band 30 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 30 Ch. 27710 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

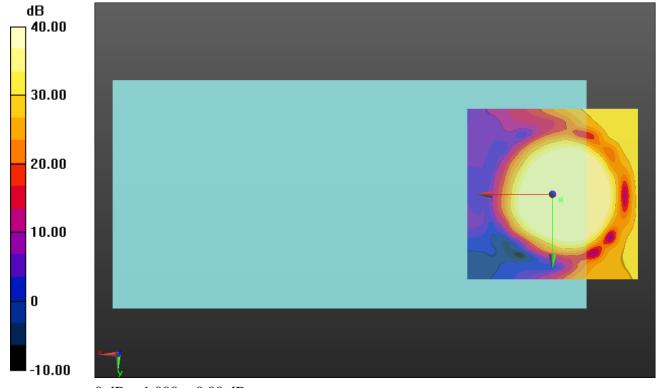
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.76 dB ABM1 comp = 11.23 dBA/m BWC Factor = 0.16 dB Location: -2.5, 1.7, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 30 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 30 Ch. 27710 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

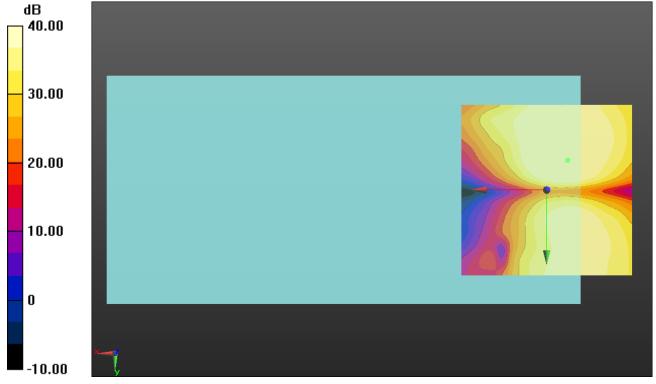
Measure Window Start: 300mseasure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.09 dB ABM1 comp = 1.67 dBA/m BWC Factor = 0.16 dB Location: -6.2, -8.8, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 41 Narrow Band

Communication System: UID 0, LTE (TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.59956

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 41 Ch 40620 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

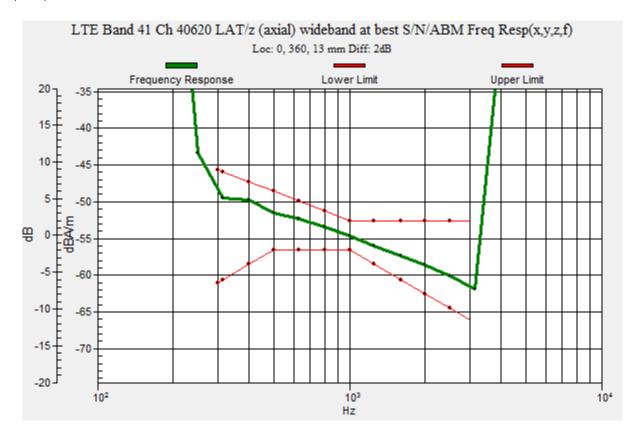
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 2.00 dB



LTE Band 41 Narrow Band

Communication System: UID 0, LTE (TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.59956

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 41 Ch 40620 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/21/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

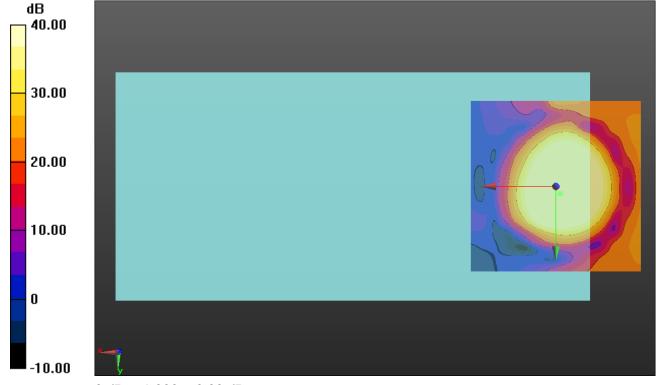
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.13 dB ABM1 comp = 10.01 dBA/m BWC Factor = 0.16 dB Location: -1.2, 2.1, 3.7 mm



LTE Band 41 Narrow Band

Communication System: UID 0, LTE (TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.59956

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 41 Ch 40620 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

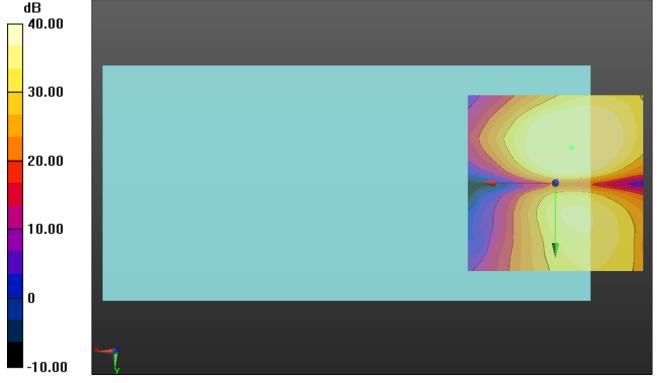
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.41 dB ABM1 comp = 0.46 dBA/m BWC Factor = 0.16 dB Location: -4.6, -10, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 66 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 66 Ch. 132322 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

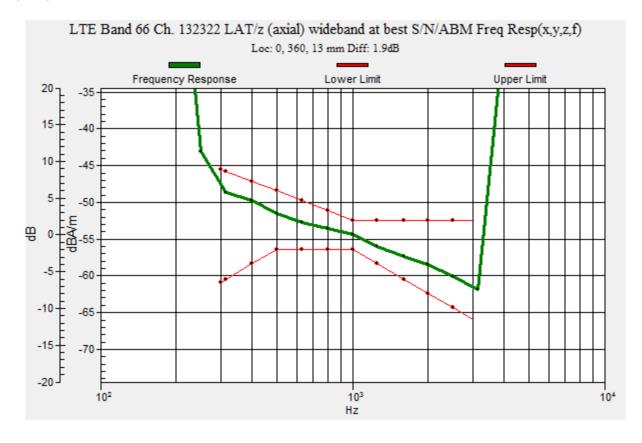
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.90 dB



LTE Band 66 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 66 Ch. 132322 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

Date: 4/25/2017

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

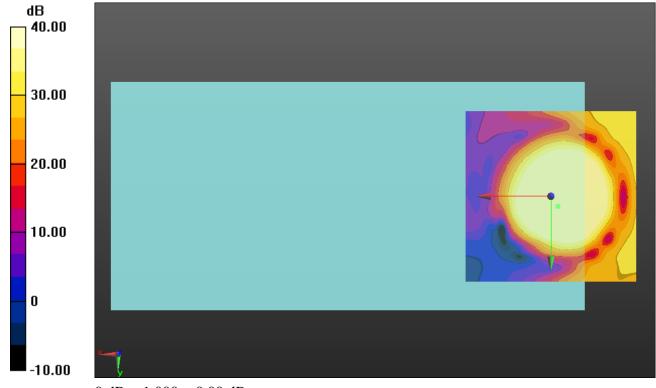
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.25 dB ABM1 comp = 9.56 dBA/m BWC Factor = 0.16 dB Location: -2.1, 2.9, 3.7 mm



LTE Band 66 Narrow Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 66 Ch. 132322 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

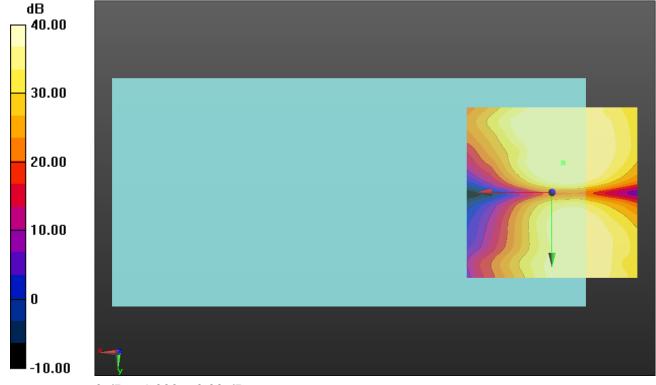
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.16 dB ABM1 comp = 1.90 dBA/m BWC Factor = 0.16 dB Location: -3.3, -8.8, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 2 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 2 Ch 18900 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

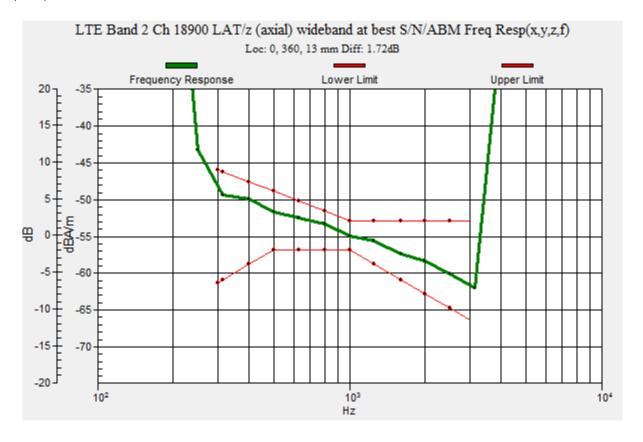
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.72 dB



LTE Band 2 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 2 Ch 18900 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

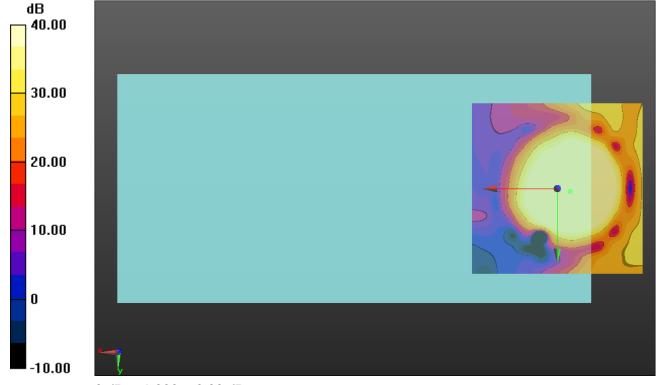
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.68 dB ABM1 comp = 10.43 dBA/m BWC Factor = 0.16 dB Location: -3.7, 0.8, 3.7 mm



LTE Band 2 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 2 Ch 18900 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

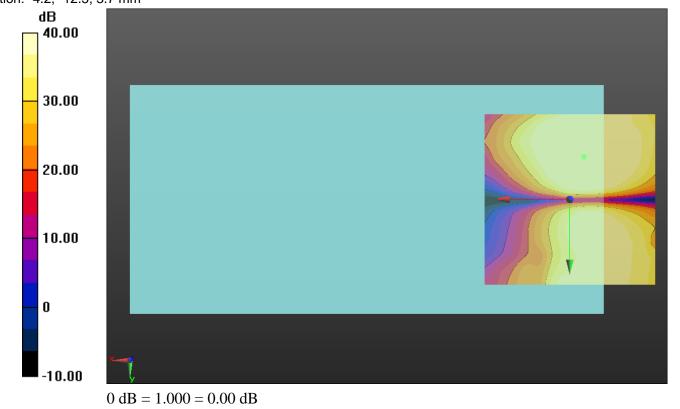
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 46.86 dB ABM1 comp = 0.88 dBA/m BWC Factor = 0.16 dB Location: -4.2, -12.5, 3.7 mm



LTE Band 4 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 4 Ch 20175 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

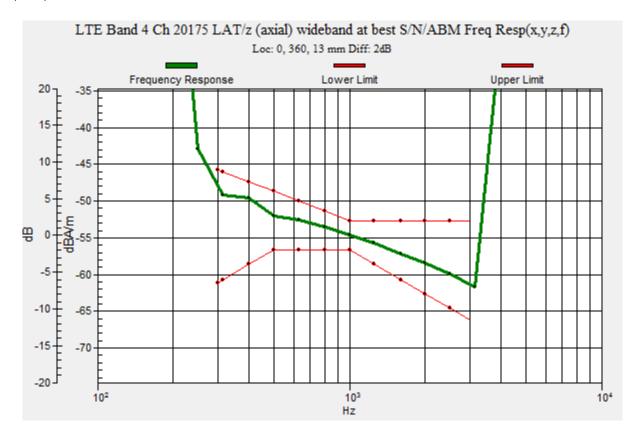
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 2.00 dB



LTE Band 4 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 4 Ch 20175 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

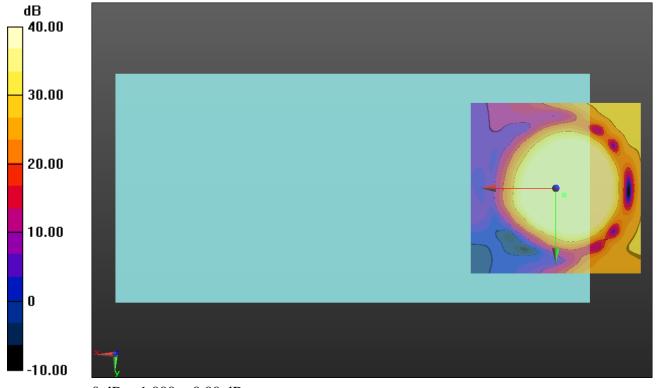
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.54 dB ABM1 comp = 9.64 dBA/m BWC Factor = 0.16 dB Location: -2.5, 2.1, 3.7 mm



LTE Band 4 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 4 Ch 20175 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

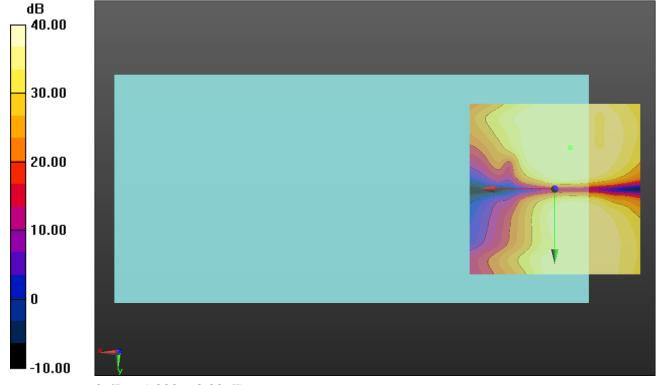
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.85 dB ABM1 comp = 0.35 dBA/m BWC Factor = 0.16 dB Location: -4.6, -12.1, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 5 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 5 Ch 20525 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

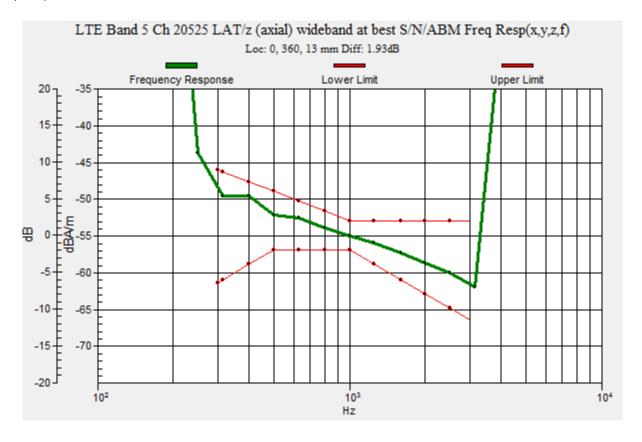
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.93 dB



LTE Band 5 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 5 Ch 20525 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

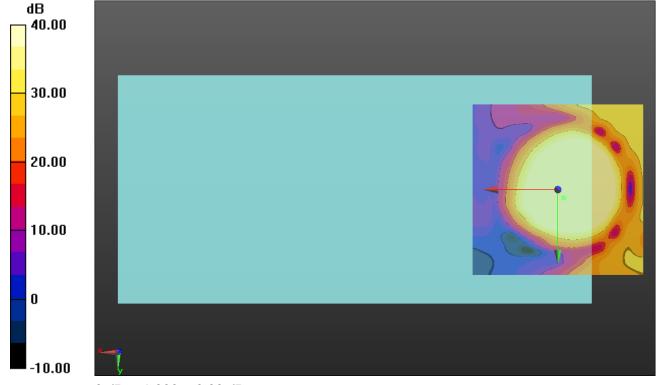
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.91 dB ABM1 comp = 9.81 dBA/m BWC Factor = 0.16 dB Location: -1.7, 2.5, 3.7 mm



LTE Band 5 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 5 Ch 20525 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

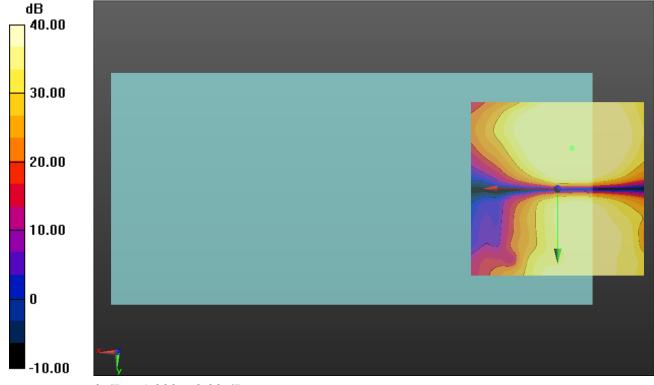
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 47.24 dB ABM1 comp = 0.97 dBA/m BWC Factor = 0.16 dB Location: -4.2, -11.7, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 7 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 7 Ch 21100 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

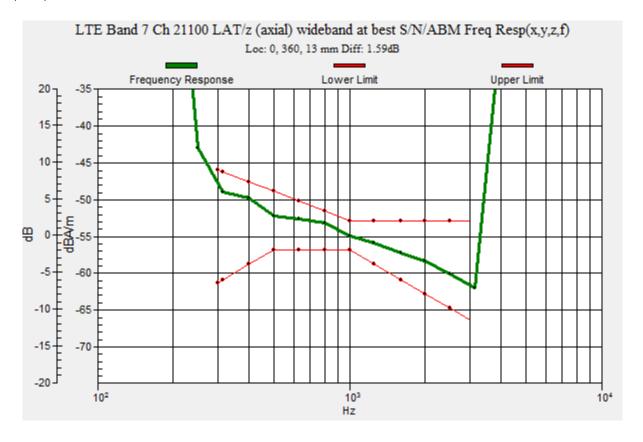
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.59 dB



LTE Band 7 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 7 Ch 21100 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

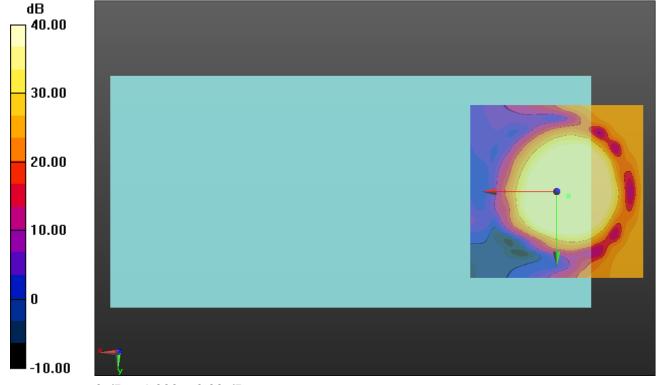
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 53.19 dB ABM1 comp = 9.17 dBA/m BWC Factor = 0.16 dB Location: -3.3, 1.2, 3.7 mm



LTE Band 7 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 7 Ch 21100 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

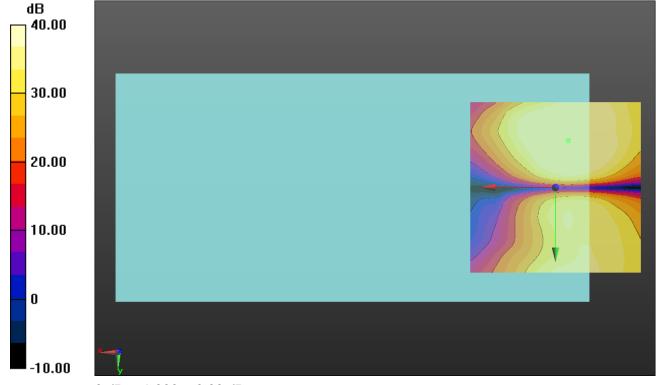
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 44.76 dB ABM1 comp = -1.14 dBA/m BWC Factor = 0.16 dB Location: -3.7, -13.8, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 12 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 12 Ch 23095 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

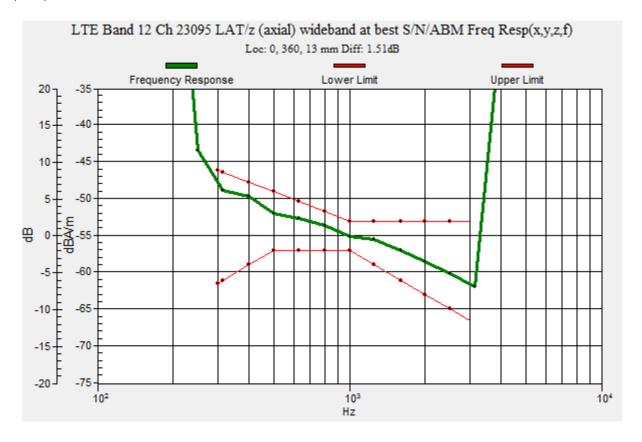
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.51 dB



LTE Band 12 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 12 Ch 23095 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

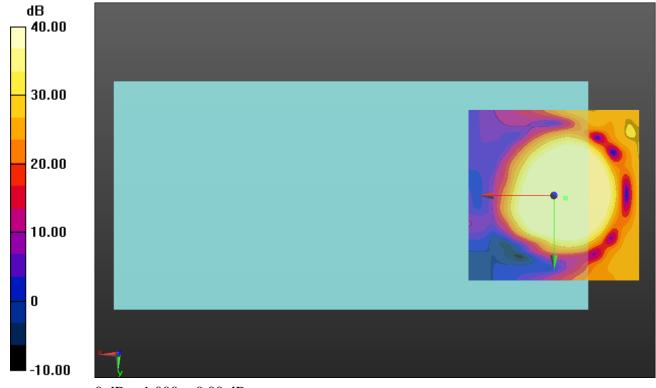
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.52 dB ABM1 comp = 9.19 dBA/m BWC Factor = 0.16 dB Location: -3.3, 0.8, 3.7 mm



LTE Band 12 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 12 Ch 23095 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

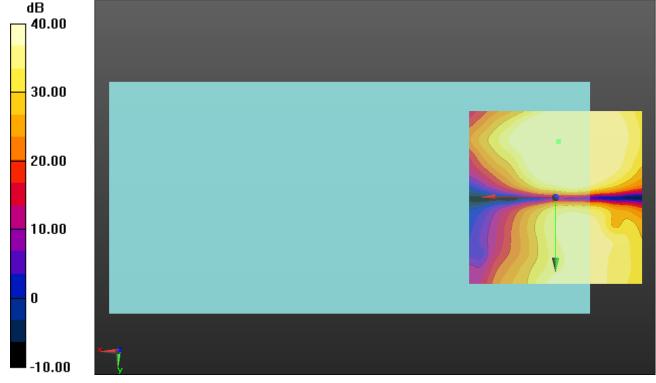
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 47.27 dB ABM1 comp = -2.53 dBA/m BWC Factor = 0.16 dB Location: -0.8, -16.3, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 13 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 782 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 13 Ch 23230 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

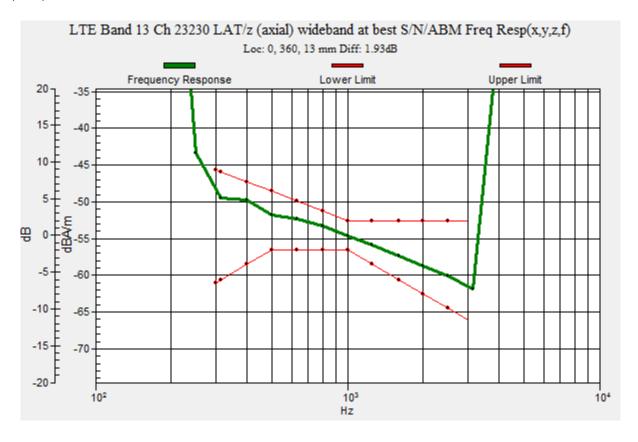
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.93 dB



LTE Band 13 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 782 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 13 Ch 23230 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

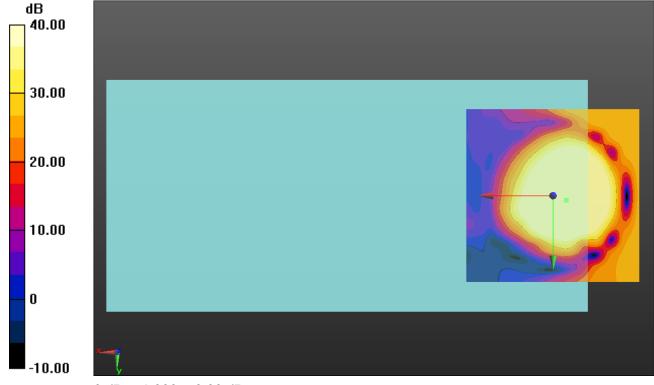
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.52 dB ABM1 comp = 9.64 dBA/m BWC Factor = 0.16 dB Location: -3.7, 1.2, 3.7 mm



LTE Band 13 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 782 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 13 Ch 23230 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

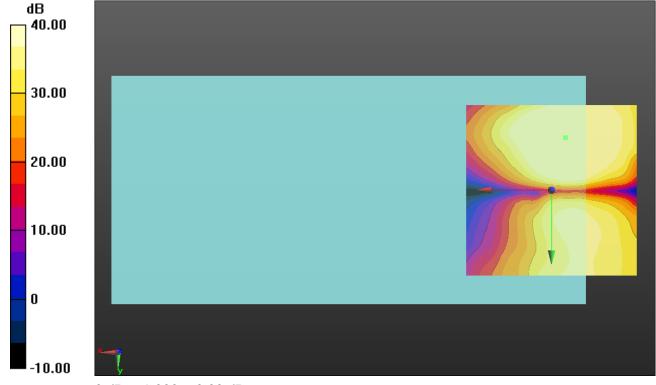
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.64 dB ABM1 comp = -2.05 dBA/m BWC Factor = 0.16 dB Location: -4.2, -15.4, 3.7 mm



LTE Band 17 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 710 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 17 Ch 23790 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

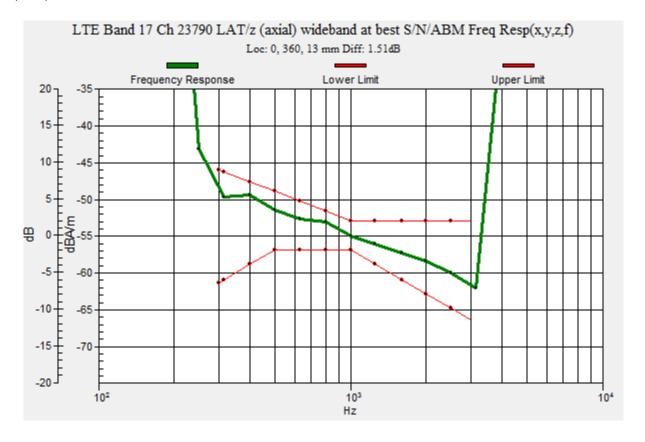
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.51 dB



LTE Band 17 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 710 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 17 Ch 23790 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

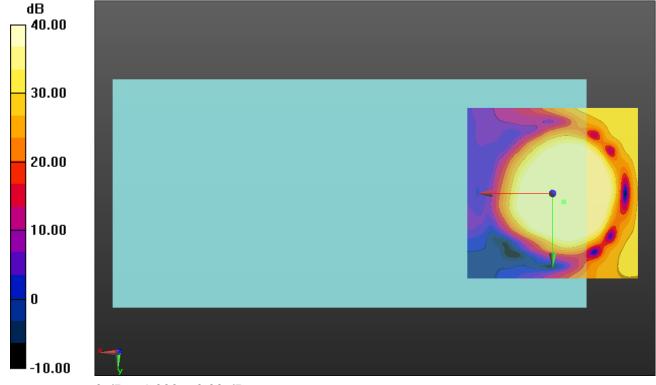
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.93 dB ABM1 comp = 9.40 dBA/m BWC Factor = 0.16 dB Location: -3.3, 2.5, 3.7 mm



LTE Band 17 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 710 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 17 Ch 23790 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

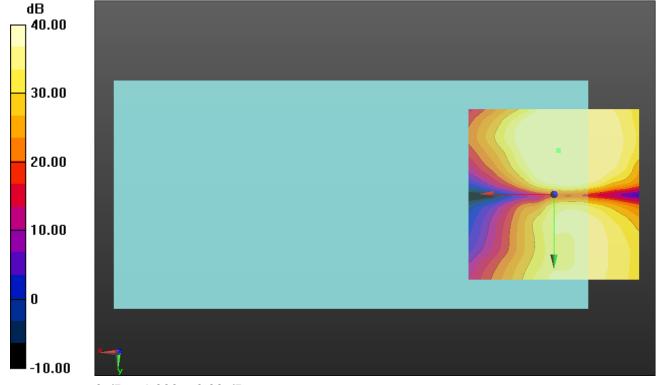
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.57 dB ABM1 comp = 0.70 dBA/m BWC Factor = 0.16 dB Location: -1.2, -12.9, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 25 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 25 Ch 26365 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

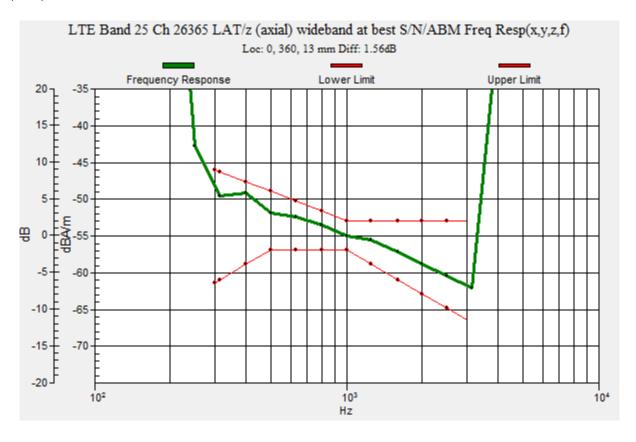
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.56 dB



LTE Band 25 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 25 Ch 26365 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

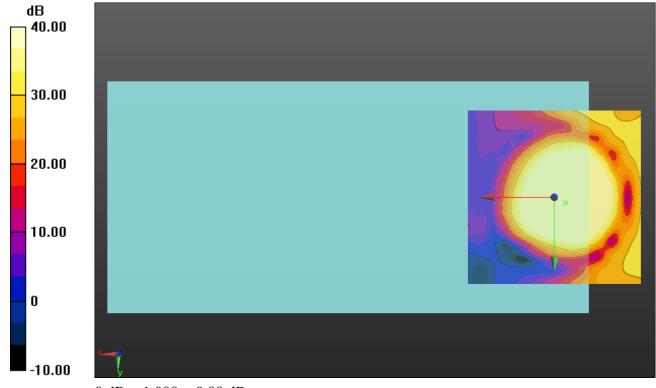
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 55.05 dB ABM1 comp = 10.47 dBA/m BWC Factor = 0.16 dB Location: -3.3, 1.7, 3.7 mm



LTE Band 25 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 25 Ch 26365 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

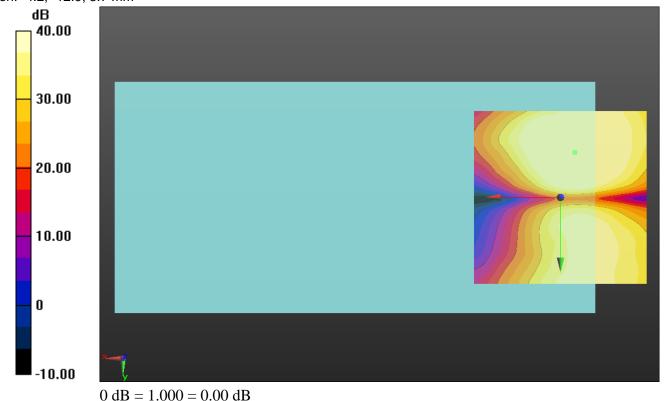
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 46.79 dB ABM1 comp = 0.24 dBA/m BWC Factor = 0.16 dB Location: -4.2, -12.9, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/20/2017

LTE Band 26 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 26 Ch 26865 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

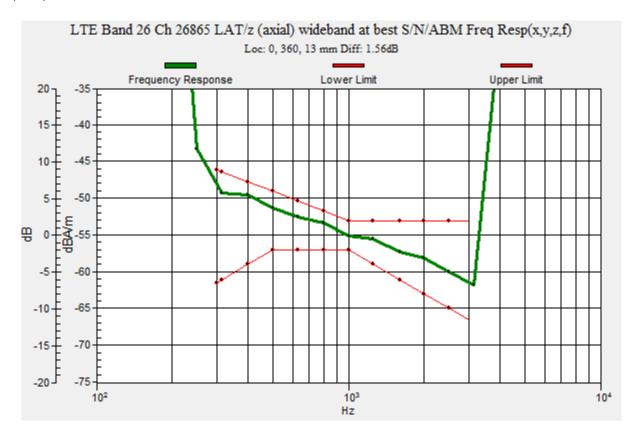
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.56 dB



LTE Band 26 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 26 Ch 26865 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/20/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

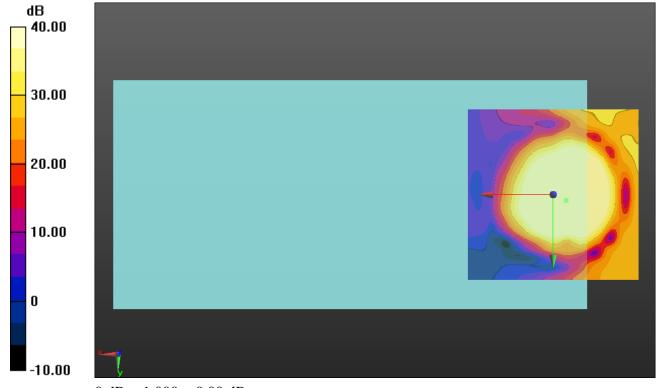
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.82 dB ABM1 comp = 9.76 dBA/m BWC Factor = 0.16 dB Location: -3.7, 1.7, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 26 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 26 Ch 26865 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

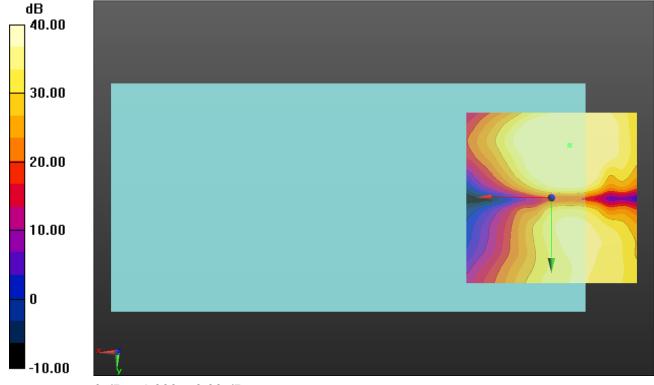
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.46 dB ABM1 comp = -2.41 dBA/m BWC Factor = 0.16 dB Location: -5.4, -15.4, 3.7 mm



0 dB = 1.000 = 0.00 dB

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 30 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2310 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 30 Ch 27710 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

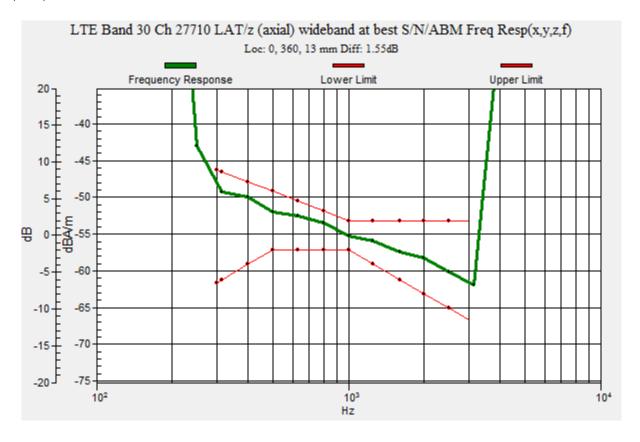
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.55 dB



LTE Band 30 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 30 Ch 27710 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/21/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

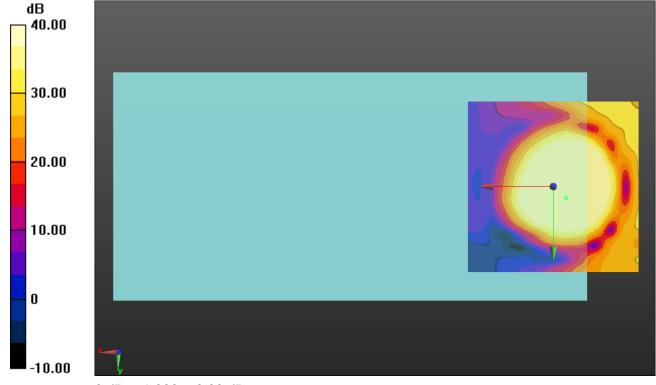
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.53 dB ABM1 comp = 9.16 dBA/m BWC Factor = 0.16 dB Location: -3.7, 3.3, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 30 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 2310 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 30 Ch 27710 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

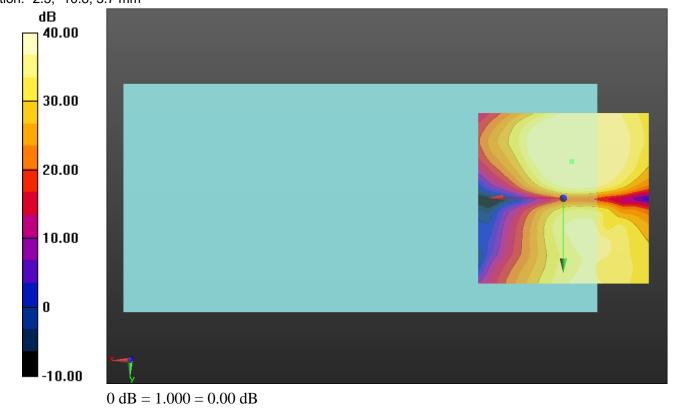
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 44.81 dB ABM1 comp = 1.96 dBA/m BWC Factor = 0.16 dB Location: -2.5, -10.8, 3.7 mm



Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 41 Wide Band

Communication System: UID 0, LTE (TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.59956

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 41 Ch 40620 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm, dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

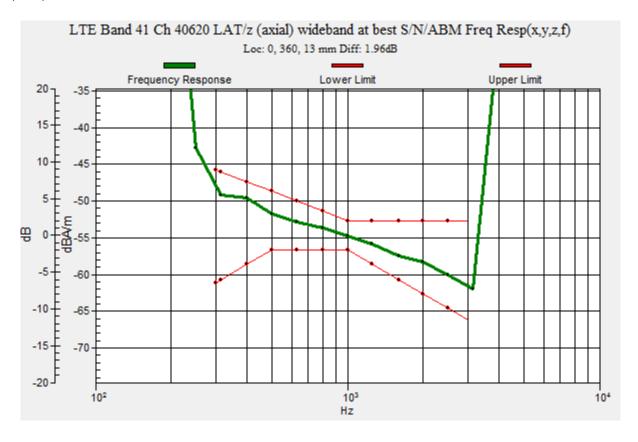
Measure Window Start: 300ms Measure Window Length: 2000ms

BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor: Diff = 1.96 dB



LTE Band 41 Wide Band

Communication System: UID 0, LTE (TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.59956

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 41 Ch 40620 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000

Date: 4/21/2017

mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

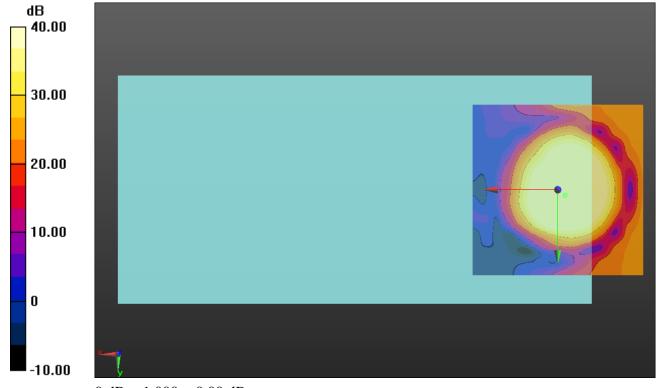
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 53.16 dB ABM1 comp = 9.95 dBA/m BWC Factor = 0.16 dB Location: -2.1, 1.7, 3.7 mm



0 dB = 1.000 = 0.00 dB

LTE Band 41 Wide Band

Communication System: UID 0, LTE (TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.59956

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 41 Ch 40620 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

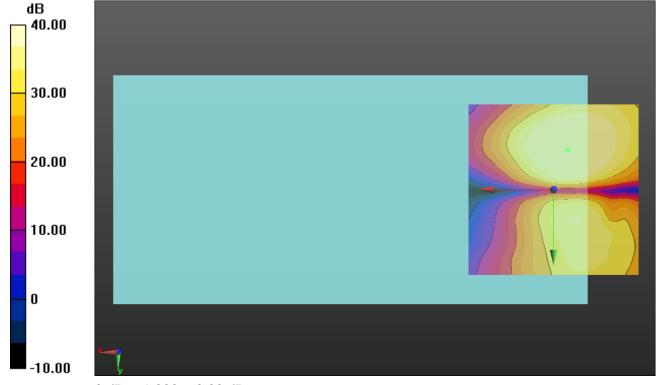
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 44.36 dB ABM1 comp = 0.10 dBA/m BWC Factor = 0.16 dB Location: -4.2, -11.7, 3.7 mm



0 dB = 1.000 = 0.00 dB

Test Laboratory: UL Verification Services Inc., SAR Lab 2 Date: 4/21/2017

LTE Band 66 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 66 Ch 132322 LAT/z (axial) wideband at best S/N/ABM Freq Resp(x,y,z,f) (1x1x1): Measurement grid: dx=10mm,

dy=10mm

Signal Type: Audio File (.wav) 48k_voice_300-3000_2s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 2000ms

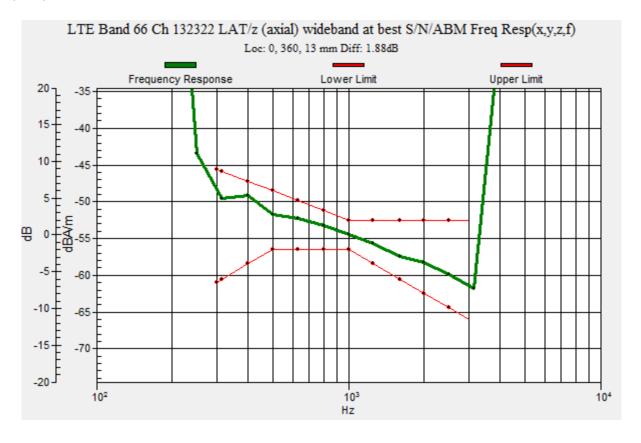
BWC applied: 10.80 dB

Device Reference Point: 0, 0, -6.3 mm

Category	Telephone parameters WD signal quality [(signal+noise)-to-noise ratio in decibels]
Category T1	0 dB to 10 dB
Category T2	10 dB to 20 dB
Category T3	20 dB to 30 dB
Category T4	> 30 dB

Cursor:

Diff = 1.88 dB



LTE Band 66 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 66 Ch 132322 LAT/z (axial) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid: dx=1.000 mm,

dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

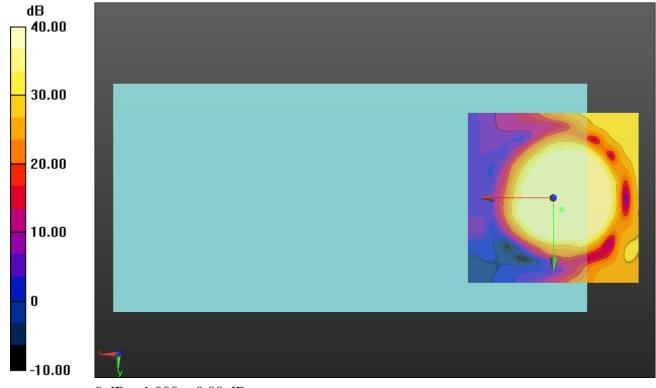
Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 54.77 dB ABM1 comp = 10.03 dBA/m BWC Factor = 0.16 dB Location: -2.5, 3.3, 3.7 mm



LTE Band 66 Wide Band

Communication System: UID 0, LTE (FDD) (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Phantom section: TCoil Section

DASY5 Configuration:

- Probe: AM1DV3 - 3092; ; Calibrated: 7/22/2016

- Sensor-Surface: 0mm (Fix Surface)

- Electronics: DAE4 Sn1259; Calibrated: 1/20/2017

- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BB

- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

T-Coil scan (scan for ANSI C63.19 2011 compliance)/LTE Band 66 Ch 132322 LAT/y (transversal) 4.2mm 50 x 50/ABM Interpolated SNR(x,y,z) (121x121x1): Interpolated grid:

dx=1.000 mm, dy=1.000 mm

Signal Type: Audio File (.wav) 48k_voice_1kHz_1s.wav

Output Gain: 100

Measure Window Start: 300ms Measure Window Length: 1000ms

BWC applied: 0.16 dB

Device Reference Point: 0, 0, -6.3 mm

Cursor:

ABM1/ABM2 = 45.63 dB ABM1 comp = -1.33 dBA/m BWC Factor = 0.16 dB Location: -2.1, -15.8, 3.7 mm

