Test Laboratory: UnionTrust Date: 2019/8/17

P01_WCDMA II_RMC12.2K_Rear Face_10mm_9538

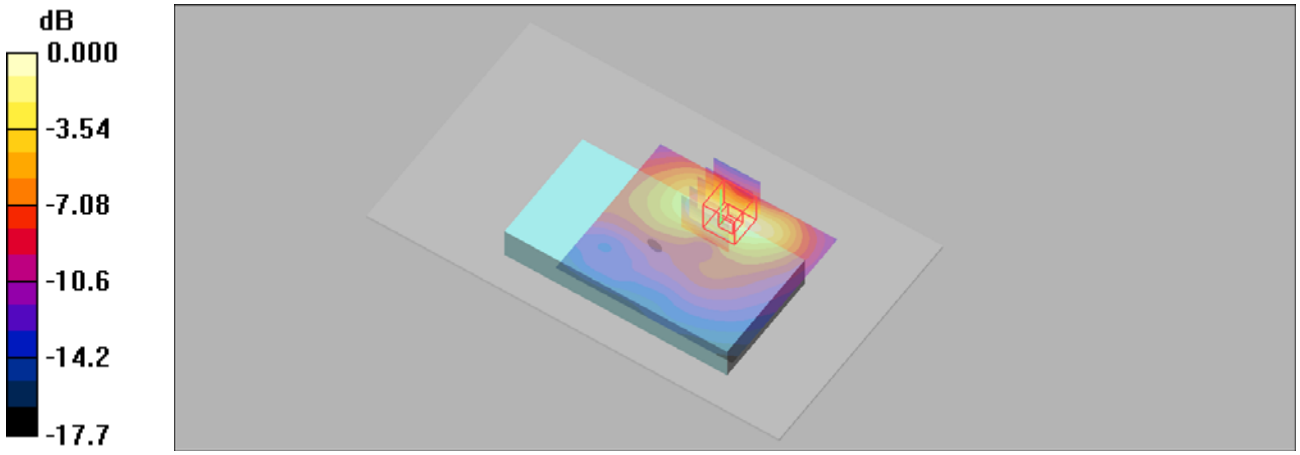
DUT: EUT

Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium: B1900 Medium parameters used: f = 1908 MHz; σ = 1.56 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

DASY4 Configuration:
- Probe: ES3DV3 - SN3090; ConvF(4.79, 4.79, 4.79); Calibrated: 2019/4/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn662; Calibrated: 2019/4/11
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: 1125
- ; Postprocessing SW: SEMCAD, V1.8 Build 186

Test/Area Scan (81x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.402 mW/g

Test/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.08 V/m; Power Drift = 0.072 dB
Peak SAR (extrapolated) = 0.571 W/kg
SAR(1 g) = 0.365 mW/g; SAR(10 g) = 0.202 mW/g
Maximum value of SAR (measured) = 0.443 mW/g



0 dB = 0.443mW/g

Test Laboratory: UnionTrust Date: 2019/8/17

P02_WCDMA IV_RMC12.2K_Rear Face_10mm_1413

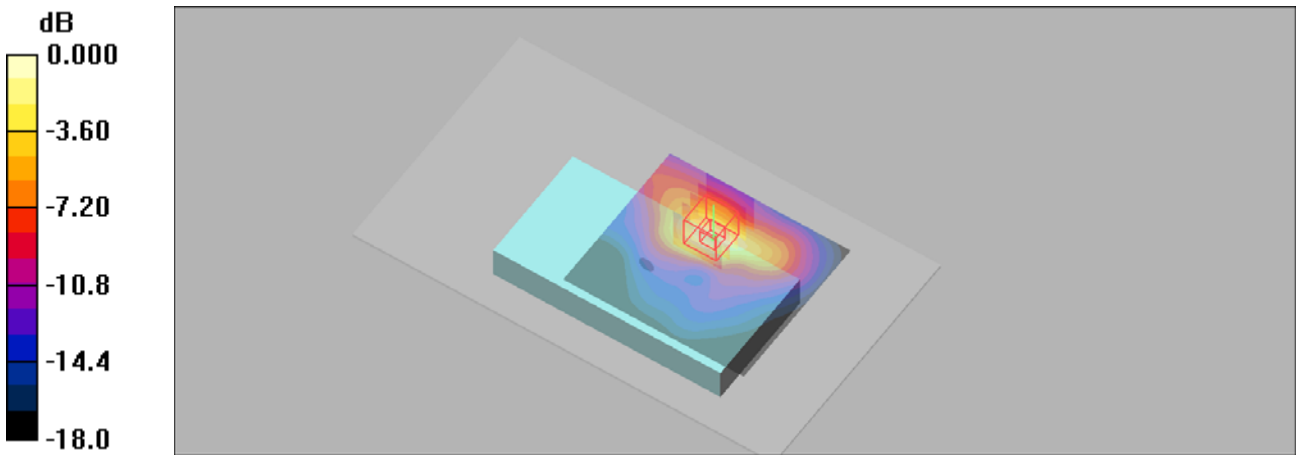
DUT: EUT

Communication System: WCDMA Band IV; Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium: B1750 Medium parameters used: f = 1733 MHz; σ = 1.45 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3

DASY4 Configuration:
- Probe: ES3DV3 - SN3090; ConvF(4.95, 4.95, 4.95); Calibrated: 2019/4/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn662; Calibrated: 2019/4/11
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: 1125
- ; Postprocessing SW: SEMCAD, V1.8 Build 186

Test/Area Scan (81x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.04 mW/g

Test/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.08 V/m; Power Drift = -0.036 dB
Peak SAR (extrapolated) = 1.35 W/kg
SAR(1 g) = 0.868 mW/g; SAR(10 g) = 0.498 mW/g
Maximum value of SAR (measured) = 1.07 mW/g



0 dB = 1.07mW/g

Test Laboratory: UnionTrust Date: 2019/8/18

P03_WCDMA V_RMC12.2K_Rear Face_10mm_4233

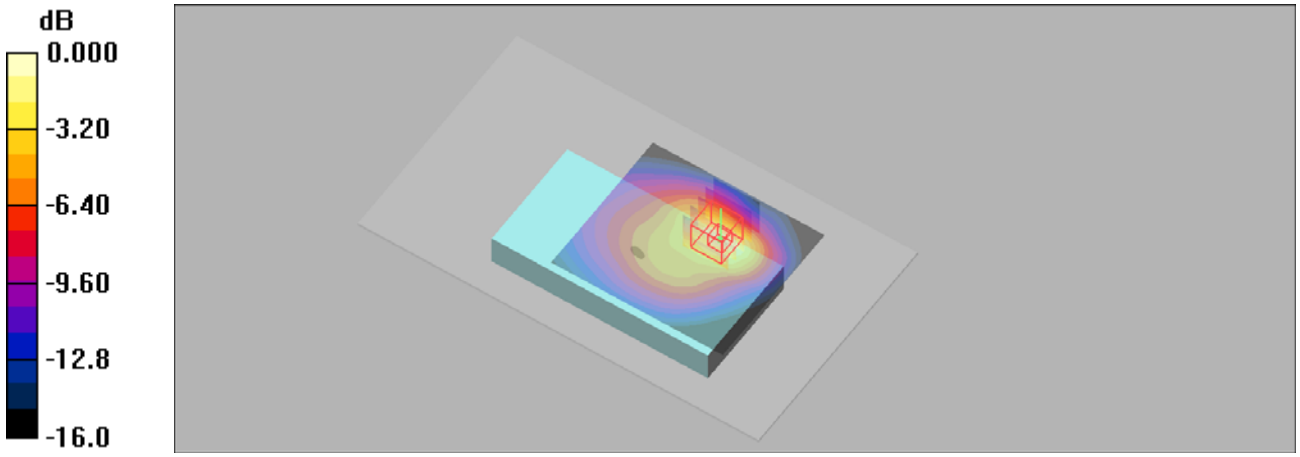
DUT: EUT

Communication System: WCDMA Band V; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: B835 Medium parameters used: f = 847 MHz; σ = 0.991 mho/m; ε_r = 57.2; ρ = 1000 kg/m^3

DASY4 Configuration:
- Probe: ES3DV3 - SN3090; ConvF(6.18, 6.18, 6.18); Calibrated: 2019/4/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn662; Calibrated: 2019/4/11
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: 1125
- ; Postprocessing SW: SEMCAD, V1.8 Build 186

Test/Area Scan (81x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.422 mW/g

Test/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.5 V/m; Power Drift = -0.193 dB
Peak SAR (extrapolated) = 0.542 W/kg
SAR(1 g) = 0.341 mW/g; SAR(10 g) = 0.195 mW/g
Maximum value of SAR (measured) = 0.429 mW/g



0 dB = 0.429mW/g

Test Laboratory: UnionTrust Date: 2019/8/17

P04_LTE 2 _QPSK20M_Rear Face_10mm_18900_1 RB_50 Offset

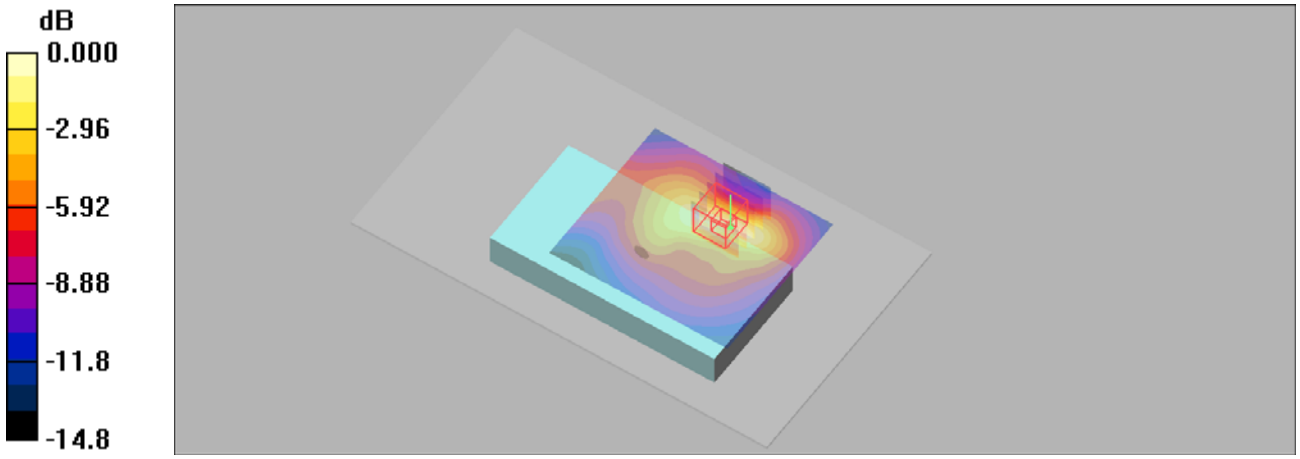
DUT: EUT

Communication System: LTE Band 2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: B1900 Medium parameters used: f = 1880 MHz; σ = 1.5 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3

DASY4 Configuration:
- Probe: ES3DV3 - SN3090; ConvF(4.79, 4.79, 4.79); Calibrated: 2019/4/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn662; Calibrated: 2019/4/11
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: 1125
- ; Postprocessing SW: SEMCAD, V1.8 Build 186

Test/Area Scan (81x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.557 mW/g

Test/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.9 V/m; Power Drift = -0.183 dB
Peak SAR (extrapolated) = 0.686 W/kg
SAR(1 g) = 0.458 mW/g; SAR(10 g) = 0.264 mW/g
Maximum value of SAR (measured) = 0.563 mW/g



0 dB = 0.563mW/g

P05_LTE 4_QPSK20M_Rear Face_10mm_20175_1RB_50 Offset

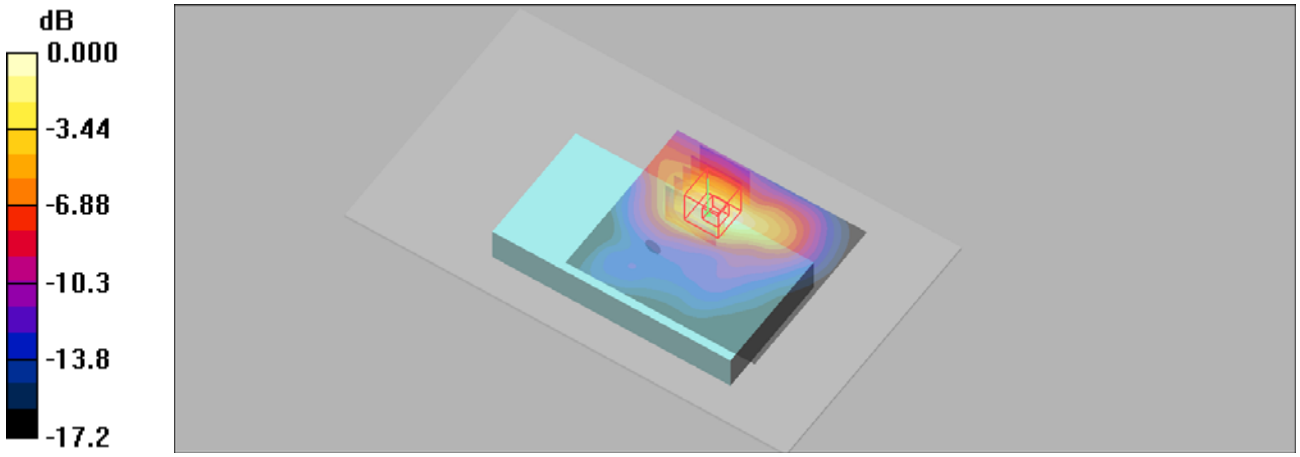
DUT: EUT

Communication System: LTE Band 4&20M; Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium: B1750 Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.45 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3

DASY4 Configuration:
- Probe: ES3DV3 - SN3090; ConvF(4.95, 4.95, 4.95); Calibrated: 2019/4/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn662; Calibrated: 2019/4/11
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: 1125
- ; Postprocessing SW: SEMCAD, V1.8 Build 186

Test/Area Scan (81x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.30 mW/g

Test/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.6 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.67 W/kg
SAR(1 g) = 0.908 mW/g; SAR(10 g) = 0.529 mW/g
Maximum value of SAR (measured) = 1.31 mW/g



0 dB = 1.31mW/g

P06_LTE 5_QPSK10M_Rear Face_10mm_20525_1RB_49 Offset

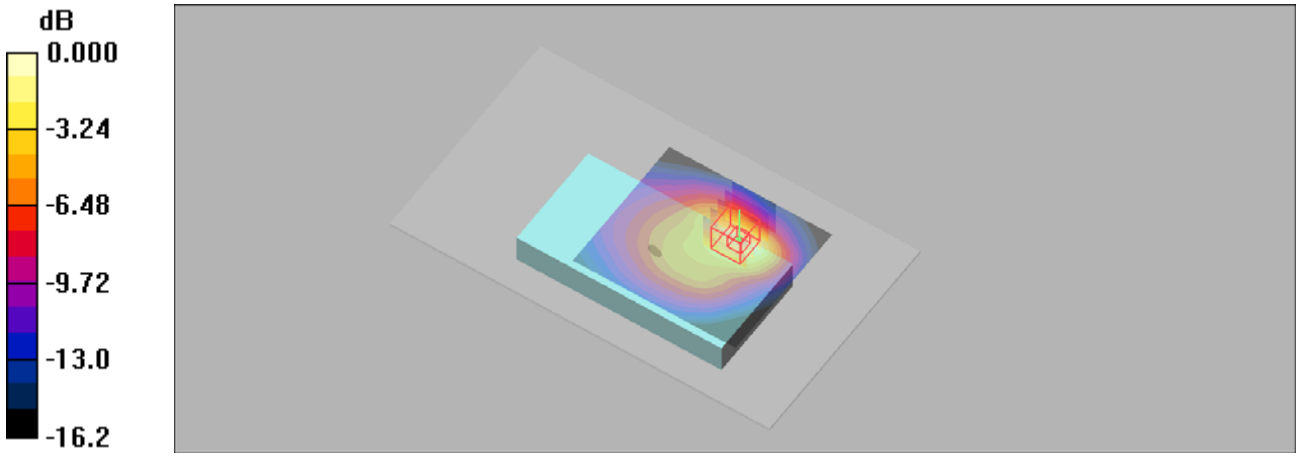
DUT: EUT

Communication System: LTE Band5; Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium: B835 Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.982 mho/m; ε_r = 57.3; ρ = 1000 kg/m^3

DASY4 Configuration:
- Probe: ES3DV3 - SN3090; ConvF(6.18, 6.18, 6.18); Calibrated: 2019/4/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn662; Calibrated: 2019/4/11
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: 1125
- ; Postprocessing SW: SEMCAD, V1.8 Build 186

Test/Area Scan (81x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.531 mW/g

Test/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = -0.199 dB
Peak SAR (extrapolated) = 0.670 W/kg
SAR(1 g) = 0.429 mW/g; SAR(10 g) = 0.248 mW/g
Maximum value of SAR (measured) = 0.523 mW/g



0 dB = 0.523mW/g

Test Laboratory: UnionTrust Date: 2019/8/18

P07_LTE 12_QPSK10M_Rear Face_10mm_23130_1 RB_24 Offset

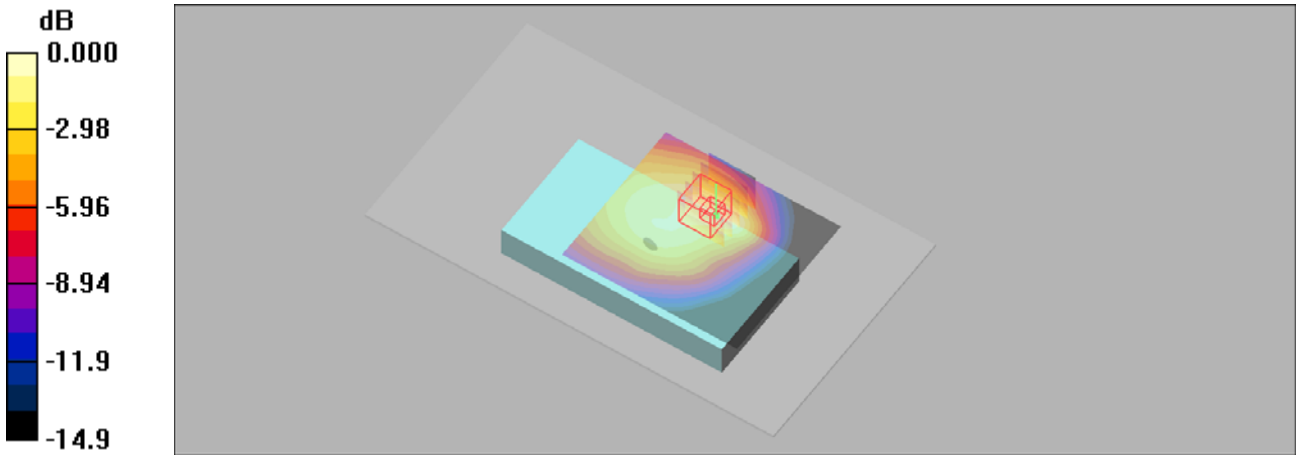
DUT: EUT

Communication System: LTE Band 12; Frequency: 711 MHz;Duty Cycle: 1:1
Medium: B750 Medium parameters used: f = 711 MHz; σ = 0.934 mho/m; ε_r = 55.6; ρ = 1000 kg/m^3

DASY4 Configuration:
- Probe: ES3DV3 - SN3090; ConvF(6.4, 6.4, 6.4); Calibrated: 2019/4/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn662; Calibrated: 2019/4/11
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: 1125
- ; Postprocessing SW: SEMCAD, V1.8 Build 186

Test/Area Scan (81x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.460 mW/g

Test/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.6 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 0.542 W/kg
SAR(1 g) = 0.347 mW/g; SAR(10 g) = 0.220 mW/g
Maximum value of SAR (measured) = 0.418 mW/g



0 dB = 0.418mW/g

P08_LTE 13_QPSK10M_Rear Face_10mm_23230_1 RB_0 Offset

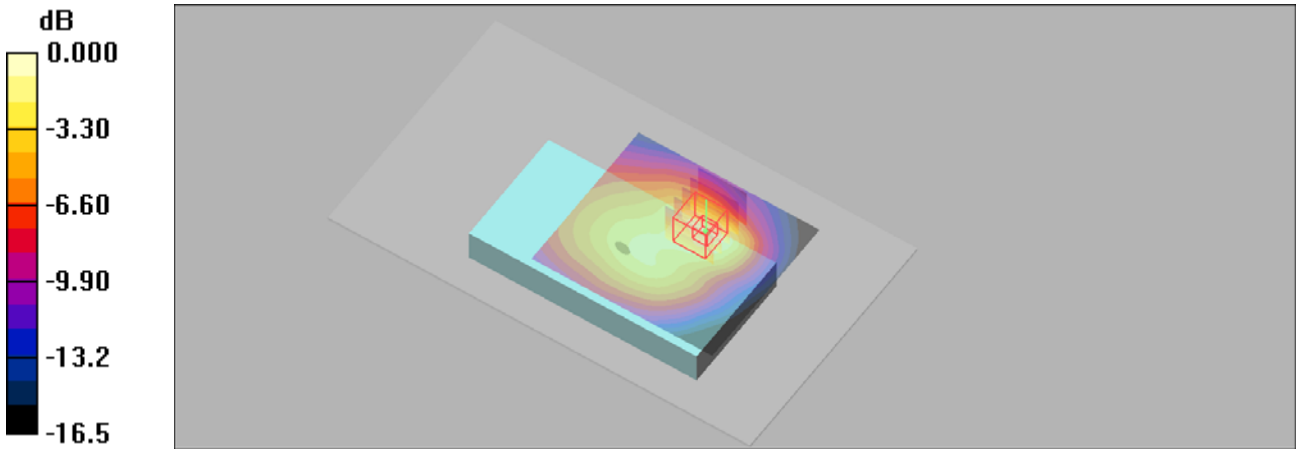
DUT: EUT

Communication System: LTE Band 13; Frequency: 782 MHz;Duty Cycle: 1:1
Medium: B750 Medium parameters used: f = 782 MHz; σ = 0.993 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3

DASY4 Configuration:
- Probe: ES3DV3 - SN3090; ConvF(6.4, 6.4, 6.4); Calibrated: 2019/4/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn662; Calibrated: 2019/4/11
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: 1125
- ; Postprocessing SW: SEMCAD, V1.8 Build 186

Test/Area Scan (81x71x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.496 mW/g

Test/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.9 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 0.694 W/kg
SAR(1 g) = 0.419 mW/g; SAR(10 g) = 0.242 mW/g
Maximum value of SAR (measured) = 0.521 mW/g



0 dB = 0.521mW/g

P09_802.11b_Rear Face_10mm_11

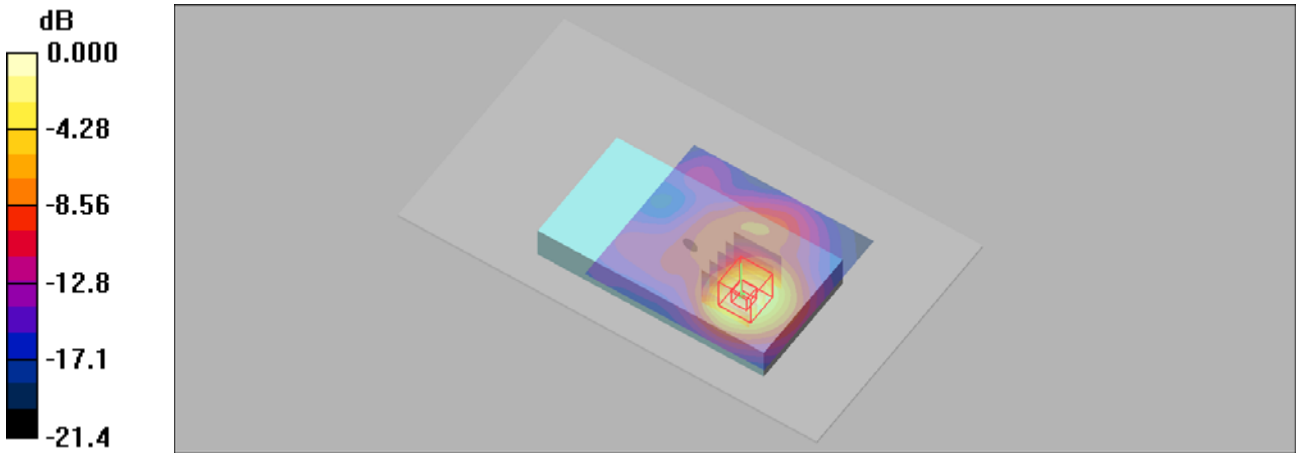
DUT: EUT

Communication System: Wlan 802.11b; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium: B2450 Medium parameters used: f = 2462 MHz; σ = 2.02 mho/m; ε_r = 52.8; ρ = 1000 kg/m^3

DASY4 Configuration:
- Probe: ES3DV3 - SN3090; ConvF(4.47, 4.47, 4.47); Calibrated: 2019/4/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn662; Calibrated: 2019/4/11
- Phantom: Triple Flat Phantom 5.1C; Type: QD 000 P51 CA; Serial: 1125
- ; Postprocessing SW: SEMCAD, V1.8 Build 186

Test/Area Scan (101x91x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (interpolated) = 0.863 mW/g

Test/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.75 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.24 W/kg
SAR(1 g) = 0.695 mW/g; SAR(10 g) = 0.352 mW/g
Maximum value of SAR (measured) = 0.876 mW/g



0 dB = 0.876mW/g

Test Laboratory: UnionTrust Date: 8/26/2019

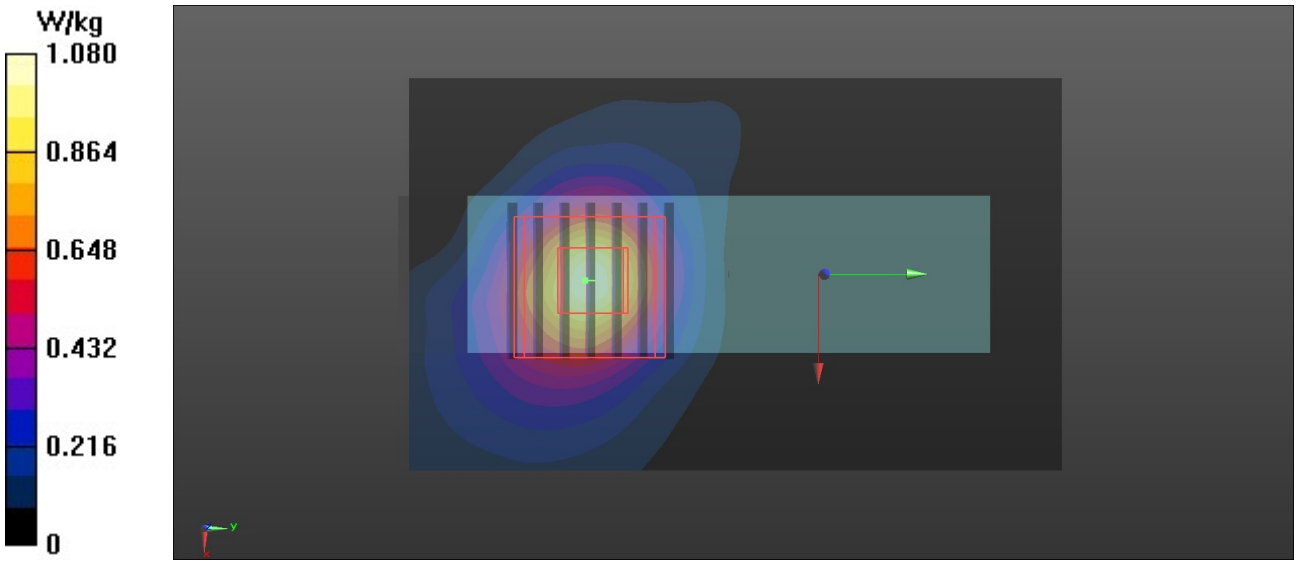
P10 802.11a_Left Side_1cm_Ch36

Communication System: 802.11a; Frequency: 5180 MHz;Duty Cycle: 1:1.17
Medium: B5G Medium parameters used: f = 5180 MHz; σ = 5.413 S/m; ε_r = 48.443; ρ = 1000 kg/m^3

DASY4 Configuration:
- Probe: EX3DV4 - SN7506; ConvF(5.03, 5.03, 5.03); Calibrated: 6/27/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1557; Calibrated: 6/18/2019
- Phantom: SAM 1; Type: QD 000 P40 CB; Serial: TP/1378
- ; Postprocessing SW: SEMCAD, V1.8 Build 18

- Area Scan (61x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.08 W/kg

- Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 2.007 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 1.67 W/kg
SAR(1 g) = 0.475 W/kg; SAR(10 g) = 0.162 W/kg
Maximum value of SAR (measured) = 1.08 W/kg

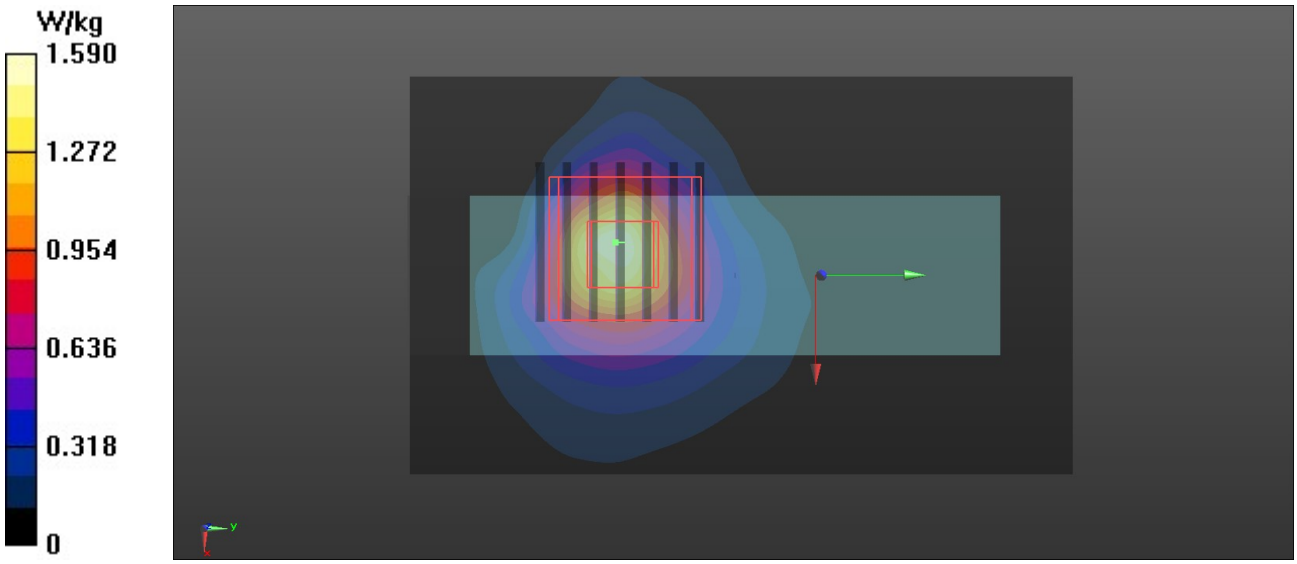


Test Laboratory: UnionTrust Date: 8/27/2019

P11 802.11a_Left Side_1cm_Ch165

Communication System: 802.11a; Frequency: 5825 MHz;Duty Cycle: 1:1.17
Medium: B5G Medium parameters used: f = 5825 MHz; σ = 6.268 S/m; ε_r = 47.339; ρ = 1000 kg/m^3

DASY4 Configuration:
- Probe: EX3DV4 - SN7506; ConvF(4.41, 4.41, 4.41); Calibrated: 6/27/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1557; Calibrated: 6/18/2019
- Phantom: SAM 1; Type: QD 000 P40 CB; Serial: TP/1378
- ; Postprocessing SW: SEMCAD, V1.8 Build 18

- Area Scan (61x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.59 W/kg

- Zoom Scan (7x7x6)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 4.445 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 2.62 W/kg
SAR(1 g) = 0.622 W/kg; SAR(10 g) = 0.206 W/kg
Maximum value of SAR (measured) = 1.53 W/kg