Test Laboratory: UL CCS SAR Lab B

1_Vertical Ant_Down

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.464 mho/m; ε_r = 52.68; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

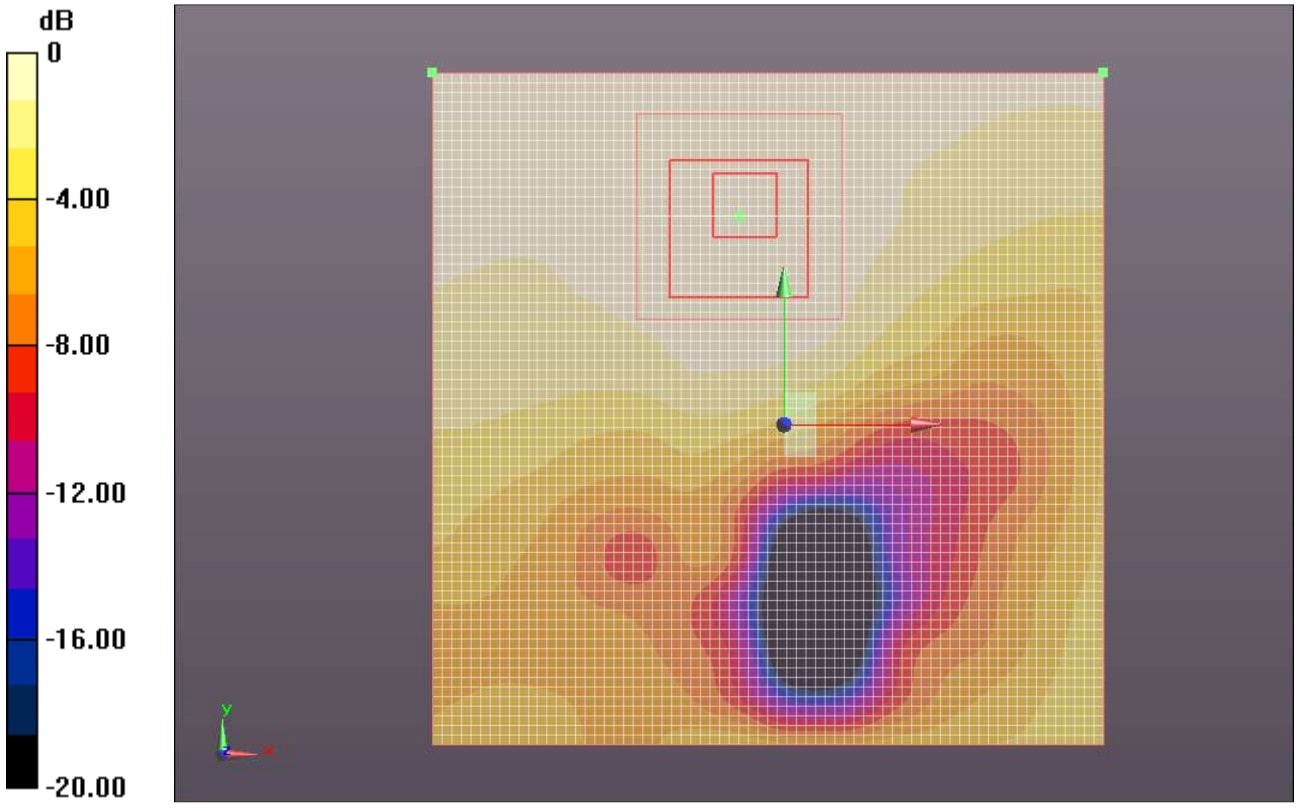
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10MHz /QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.010 mW/g

LTE Band 4 10MHz /QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.465 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.012 W/kg
SAR(1 g) = 0.00763 mW/g; SAR(10 g) = 0.00513 mW/g
Maximum value of SAR (measured) = 0.010 mW/g



0 dB = 0.010mW/g

Date: 9/7/2011

Test Laboratory: UL CCS SAR Lab B

2_Vertical Ant_Up

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.464 mho/m; ε_r = 52.68; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

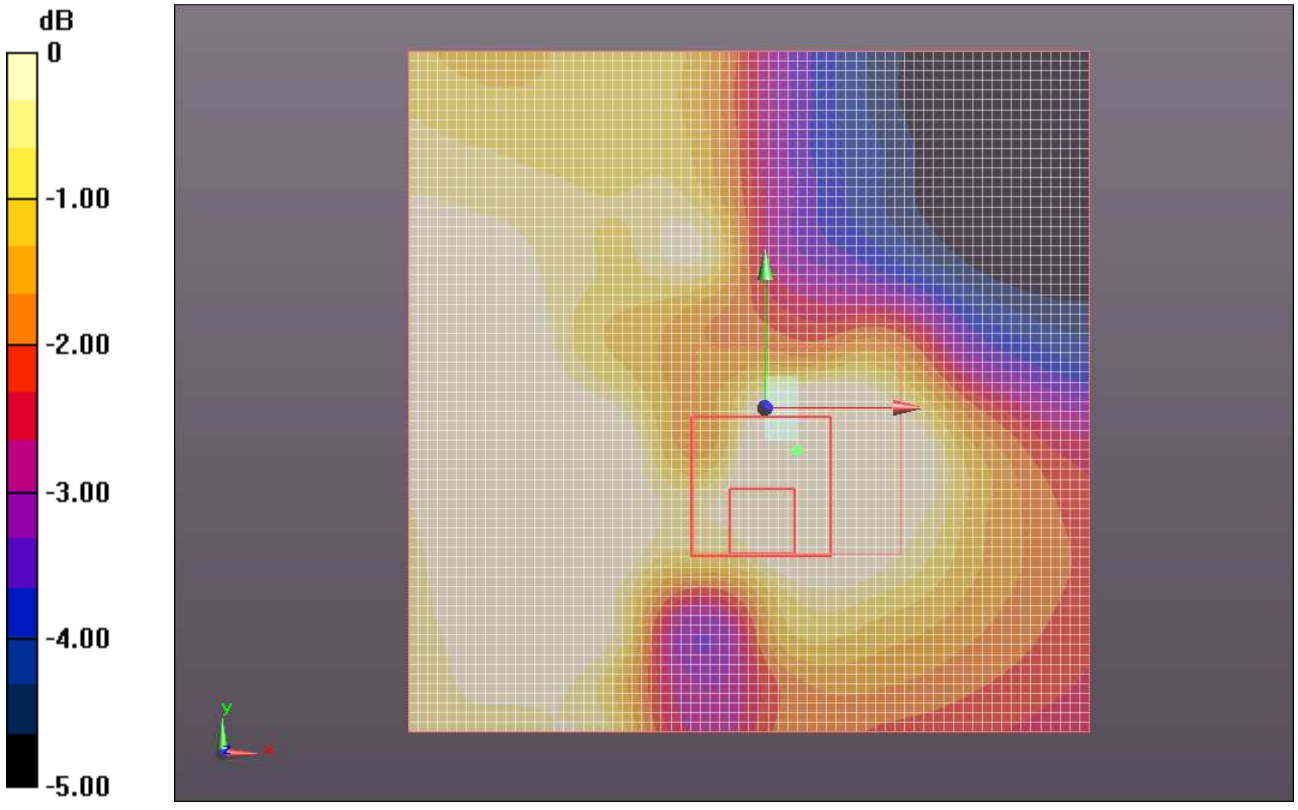
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10MHz /QPSK__RBS#1_RBO#0_Main_Ant_M-CH_38MM/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.060 mW/g

LTE Band 4 10MHz /QPSK__RBS#1_RBO#0_Main_Ant_M-CH_38MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.556 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.042 W/kg
SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.018 mW/g
Maximum value of SAR (measured) = 0.033 mW/g



0 dB = 0.030mW/g

Test Laboratory: UL CCS SAR Lab B

3_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.464 mho/m; ε_r = 52.68; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

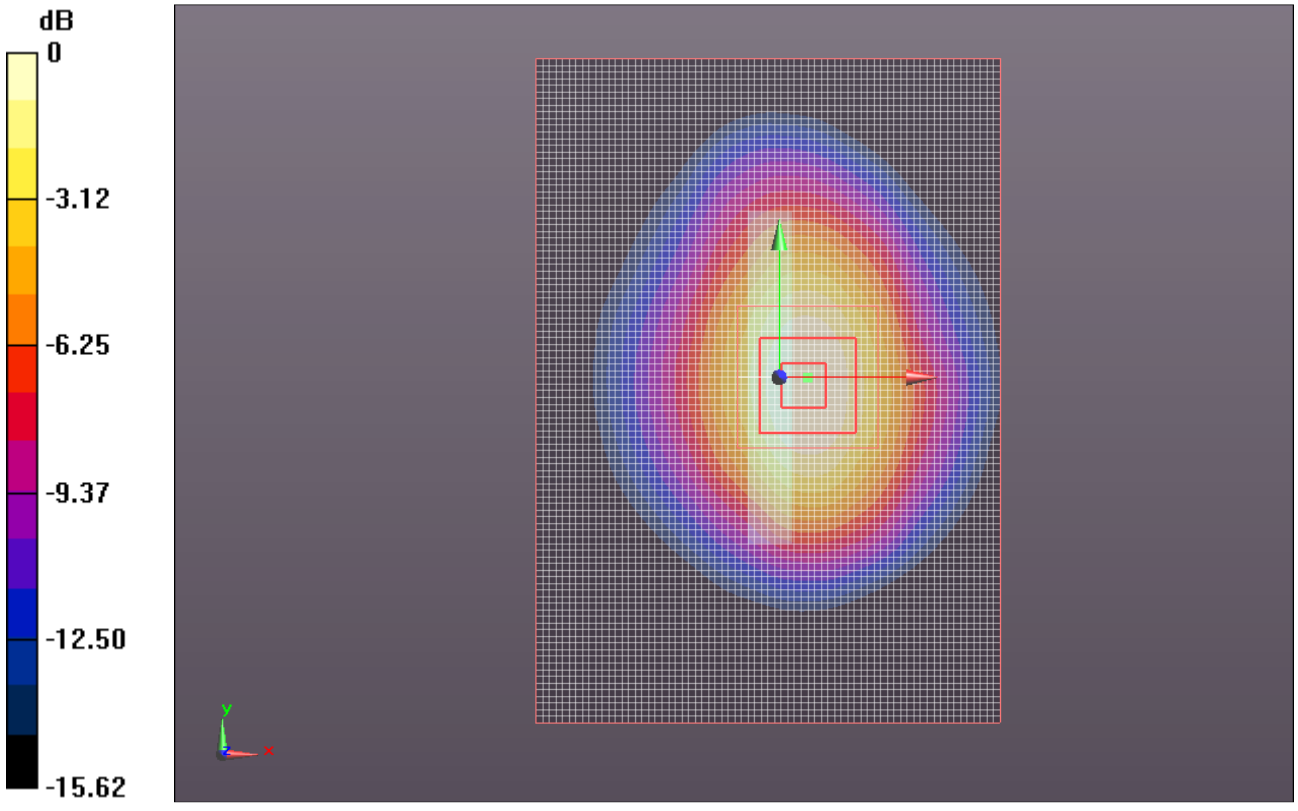
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM 2/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.442 mW/g

LTE Band 4 10MHz QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM 2/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.201 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.540 W/kg
SAR(1 g) = 0.339 mW/g; SAR(10 g) = 0.201 mW/g
Maximum value of SAR (measured) = 0.424 mW/g



0 dB = 0.420mW/g

Date: 9/8/2011

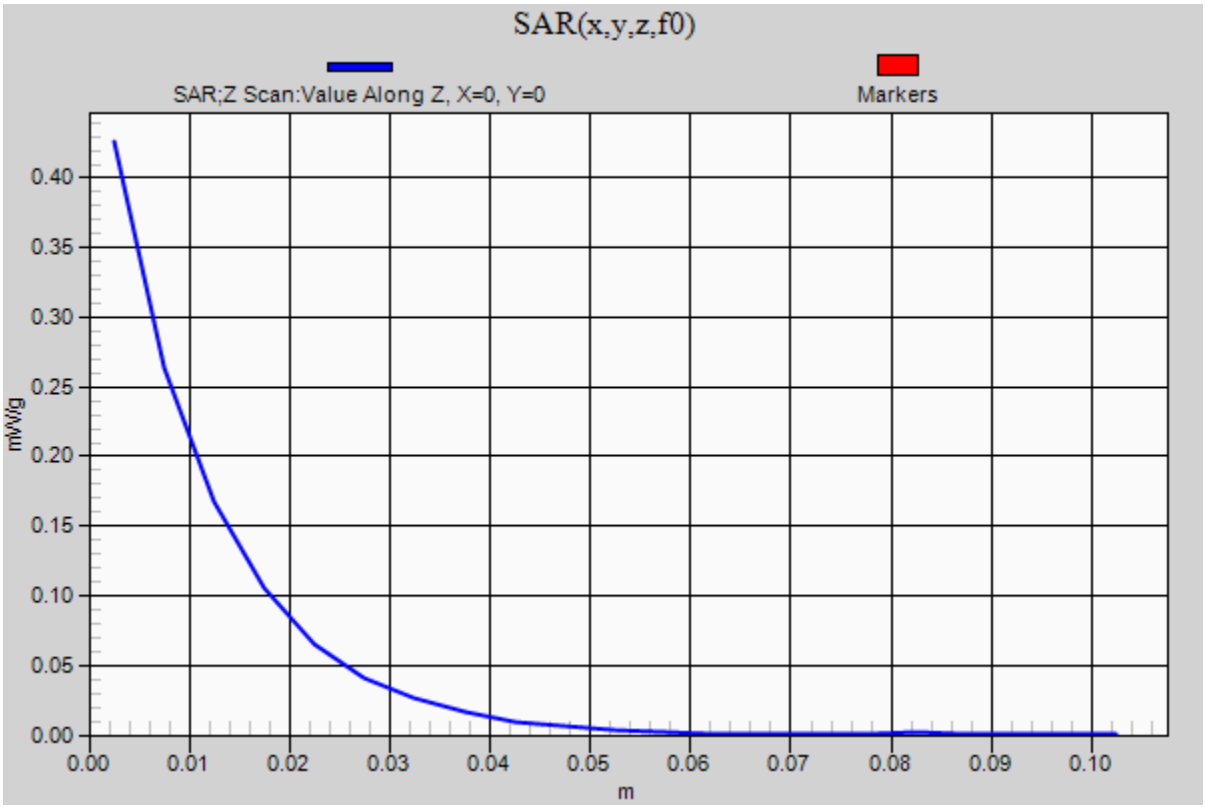
Test Laboratory: UL CCS SAR Lab B

3_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1

LTE Band 4 5MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM 2/Z Scan (1x1x21):

Measurement grid: dx=20mm, dy=20mm, dz=5mm
Maximum value of SAR (measured) = 0.426 mW/g



Date: 9/7/2011

Test Laboratory: UL CCS SAR Lab B

4_Horizontal Ant_Down

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.464 mho/m; ε_r = 52.68; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

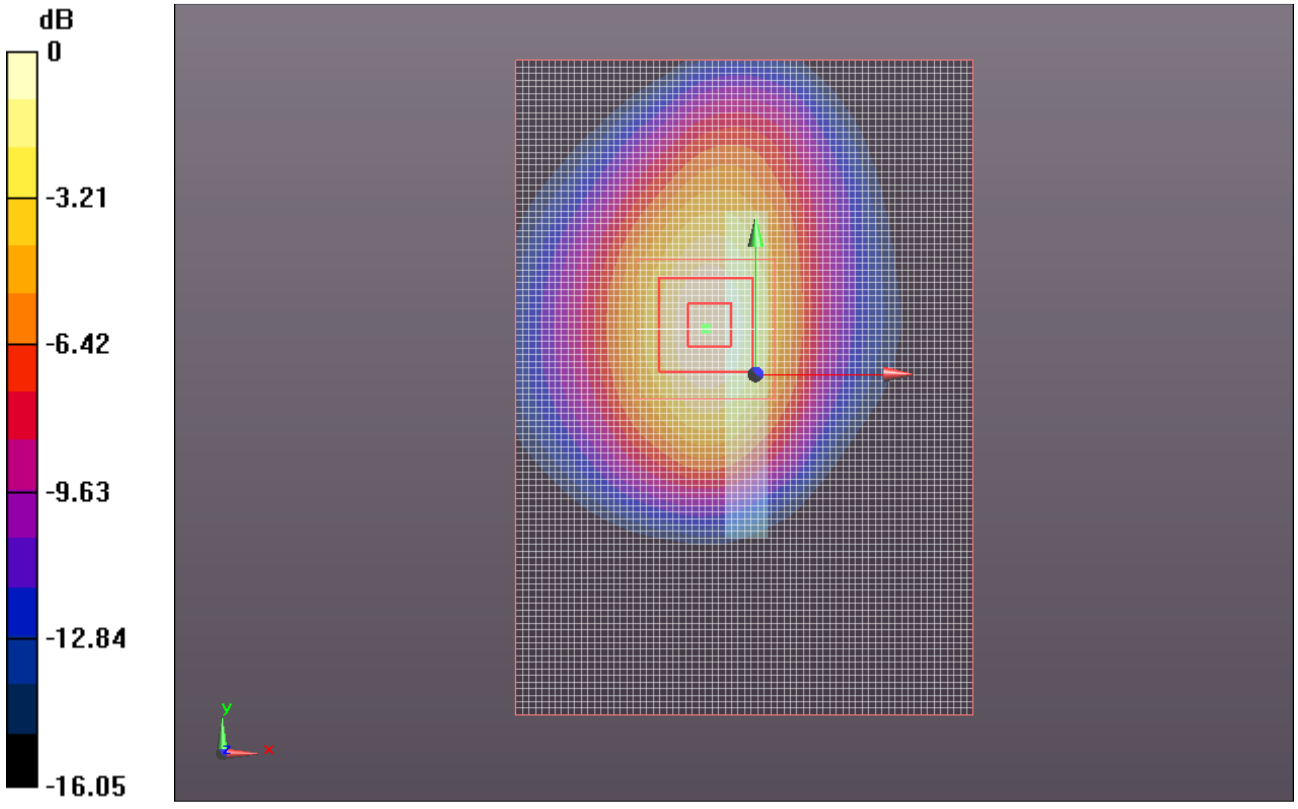
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10MHz /QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.378 mW/g

LTE Band 4 10MHz /QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.100 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.482 W/kg
SAR(1 g) = 0.296 mW/g; SAR(10 g) = 0.173 mW/g
Maximum value of SAR (measured) = 0.377 mW/g



0 dB = 0.380mW/g

Date: 9/7/2011

Test Laboratory: UL CCS SAR Lab B

5_Horizontal Ant_Front

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.464 mho/m; ε_r = 52.68; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

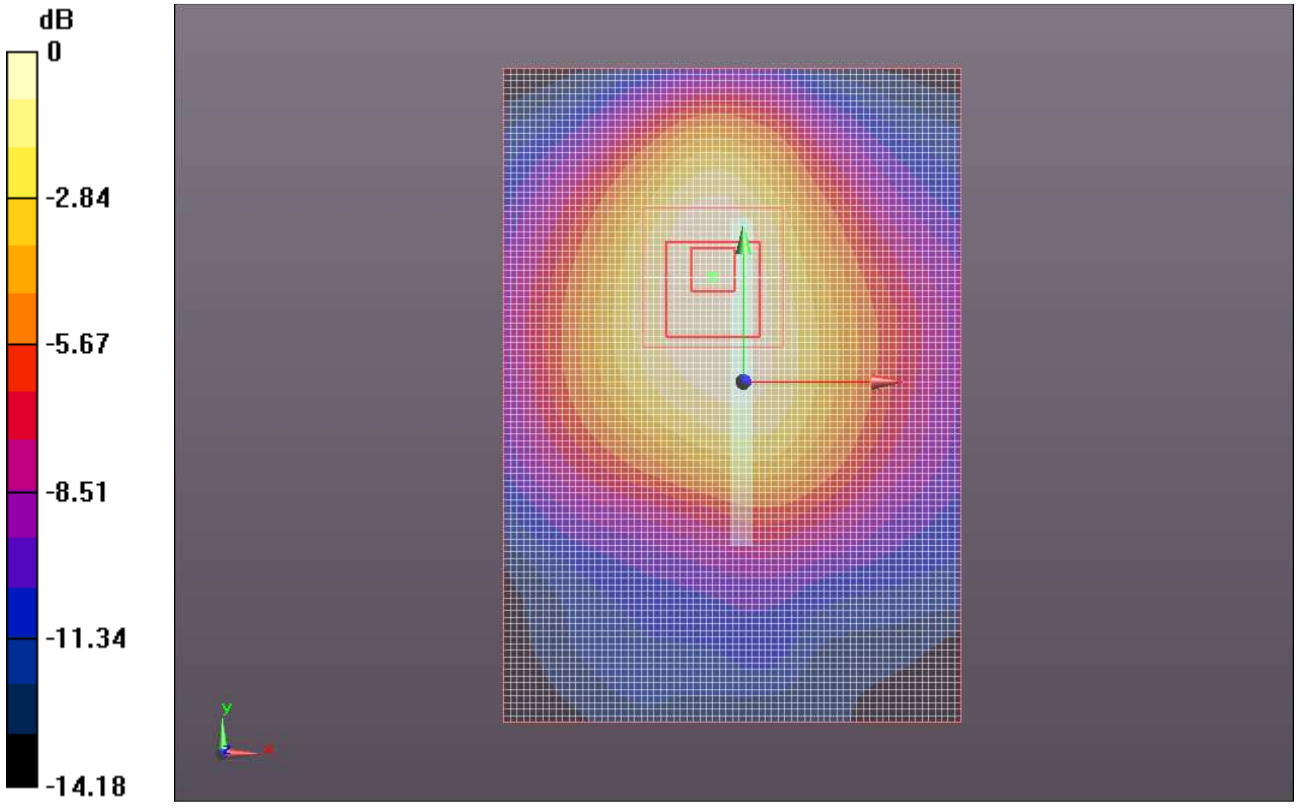
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10MHz /QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.112 mW/g

LTE Band 4 10MHz /QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.813 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.140 W/kg
SAR(1 g) = 0.089 mW/g; SAR(10 g) = 0.055 mW/g
Maximum value of SAR (measured) = 0.111 mW/g



0 dB = 0.110mW/g

Date: 9/7/2011

Test Laboratory: UL CCS SAR Lab B

6_Horizontal Ant_Back

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.464 mho/m; ε_r = 52.68; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

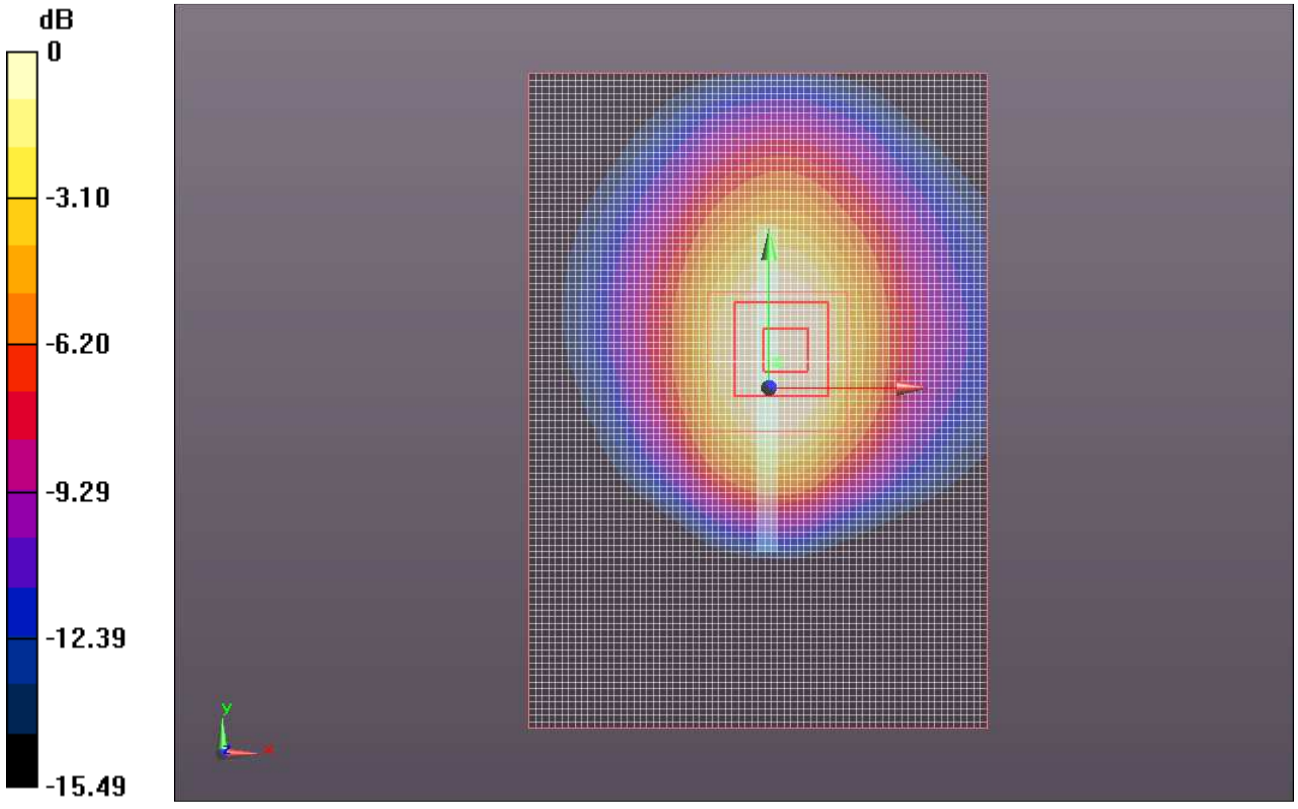
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10MHz /QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.407 mW/g

LTE Band 4 10MHz /QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.222 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.427 W/kg
SAR(1 g) = 0.268 mW/g; SAR(10 g) = 0.161 mW/g
Maximum value of SAR (measured) = 0.327 mW/g



0 dB = 0.330mW/g

Date: 9/8/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

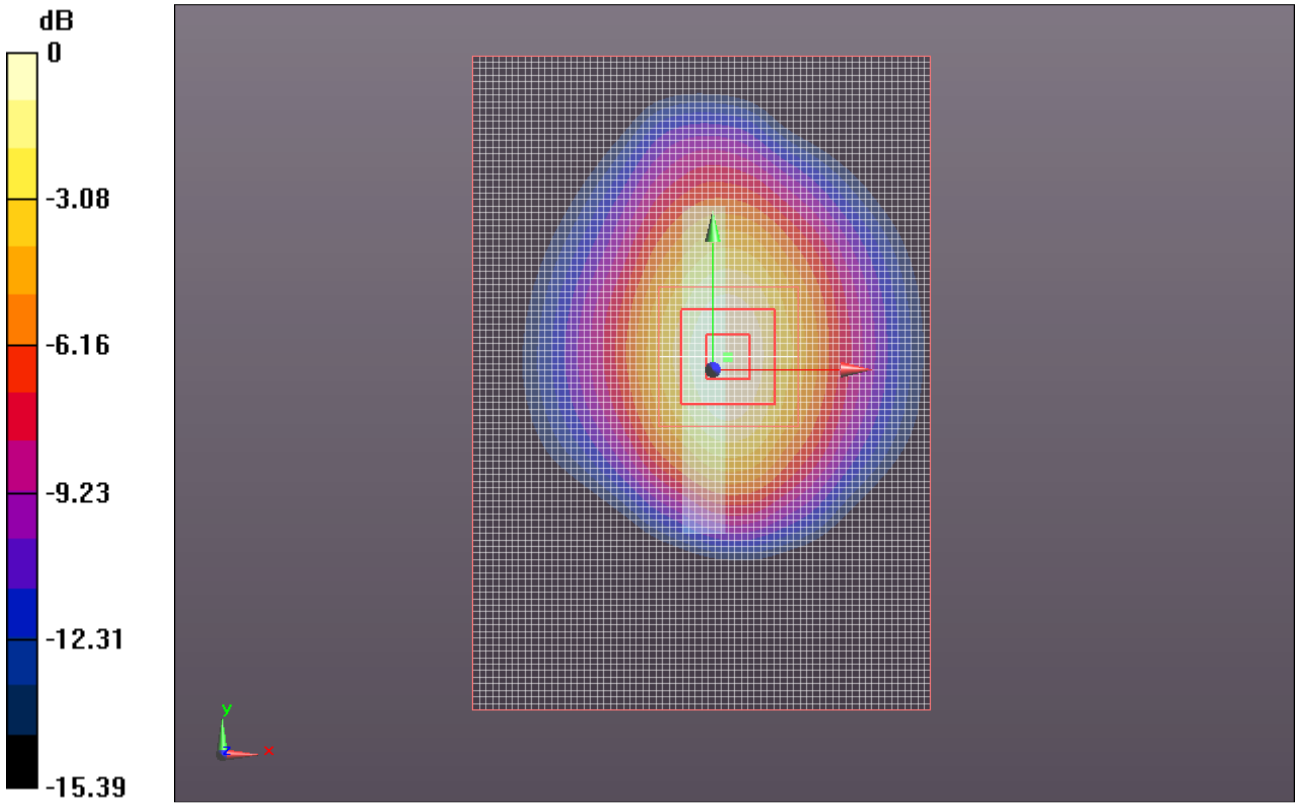
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 1.4MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.442 mW/g

LTE Band 4 1.4MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.601 V/m; Power Drift = 0.0072 dB
Peak SAR (extrapolated) = 0.545 W/kg
SAR(1 g) = 0.339 mW/g; SAR(10 g) = 0.201 mW/g
Maximum value of SAR (measured) = 0.427 mW/g



0 dB = 0.430mW/g

Date: 9/8/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

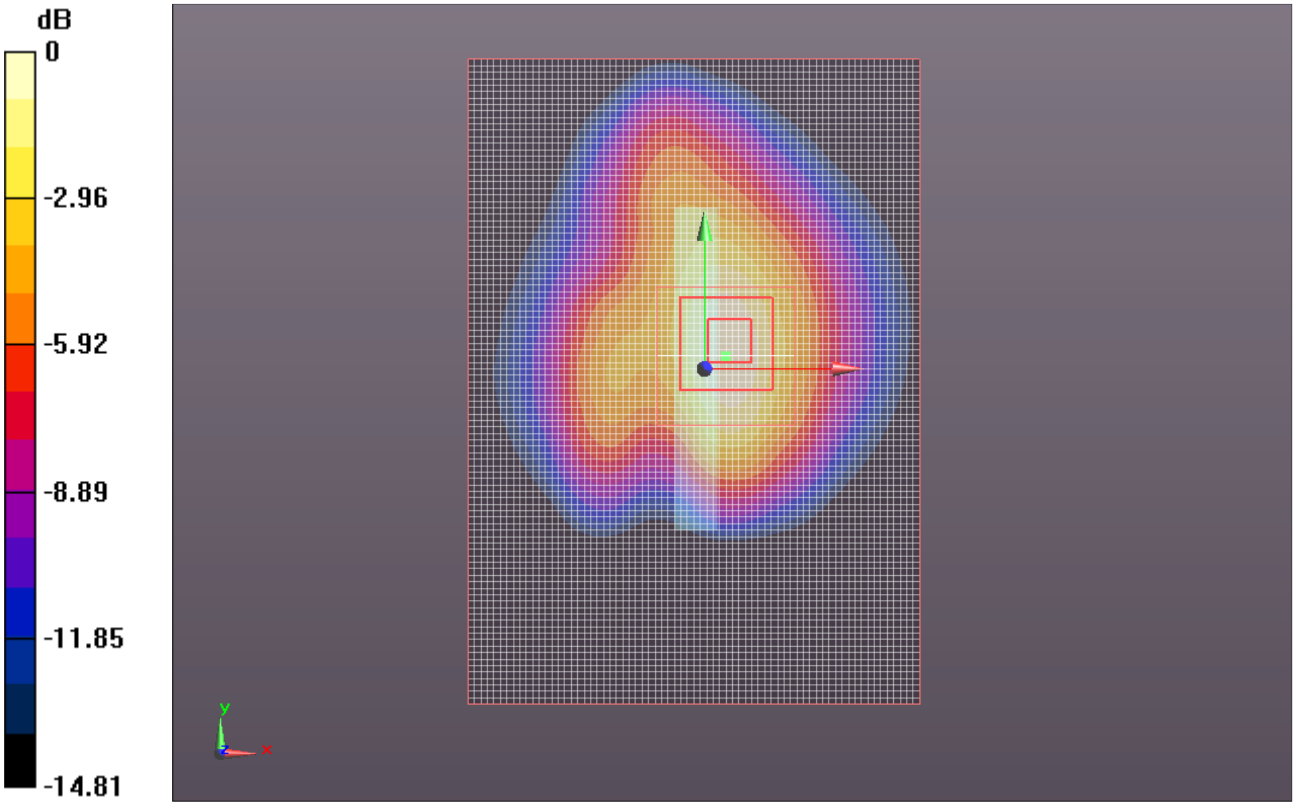
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 1.4MHz/QPSK__RBS#1_RBO#5_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.327 mW/g

LTE Band 4 1.4MHz/QPSK__RBS#1_RBO#5_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.142 V/m; Power Drift = -0.24 dB
Peak SAR (extrapolated) = 0.429 W/kg
SAR(1 g) = 0.265 mW/g; SAR(10 g) = 0.160 mW/g
Maximum value of SAR (measured) = 0.332 mW/g



0 dB = 0.330mW/g

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

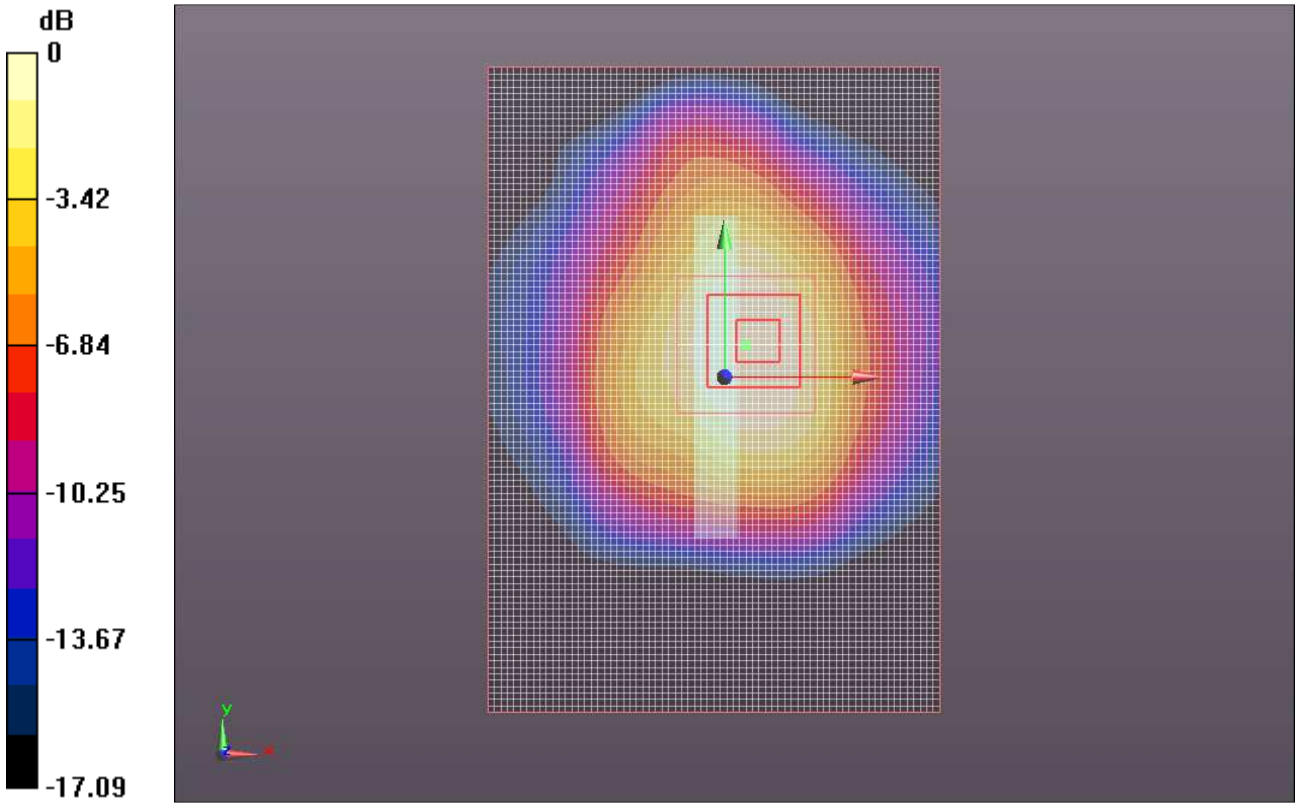
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 1.4MHz/16QAM__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.275 mW/g

LTE Band 4 1.4MHz/16QAM__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.159 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 0.321 W/kg
SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.120 mW/g
Maximum value of SAR (measured) = 0.244 mW/g



0 dB = 0.240mW/g

Date: 9/8/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

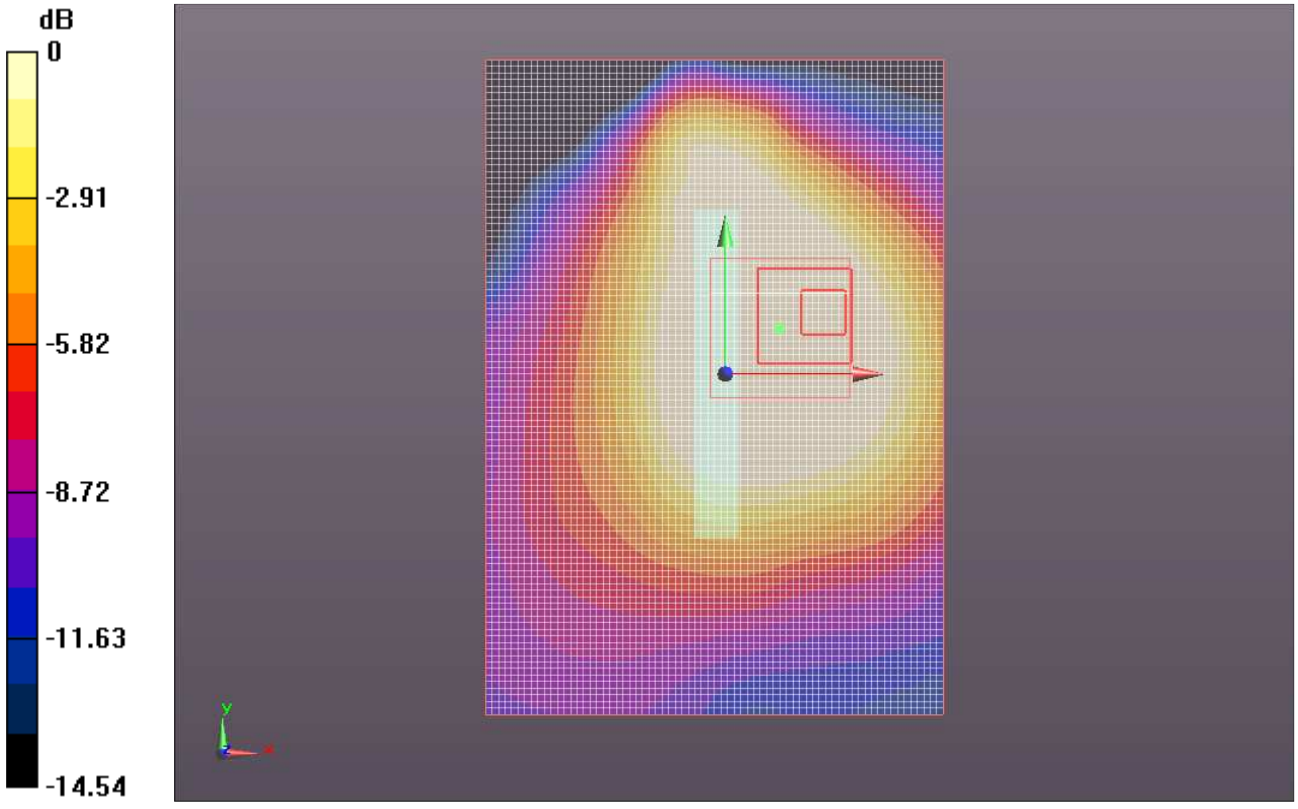
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 1.4MHz/16QAM__RBS#1_RBO#5_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.123 mW/g

LTE Band 4 1.4MHz/16QAM__RBS#1_RBO#5_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.051 V/m; Power Drift = -0.20 dB
Peak SAR (extrapolated) = 0.077 W/kg
SAR(1 g) = 0.049 mW/g; SAR(10 g) = 0.031 mW/g
Maximum value of SAR (measured) = 0.061 mW/g



0 dB = 0.060mW/g

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

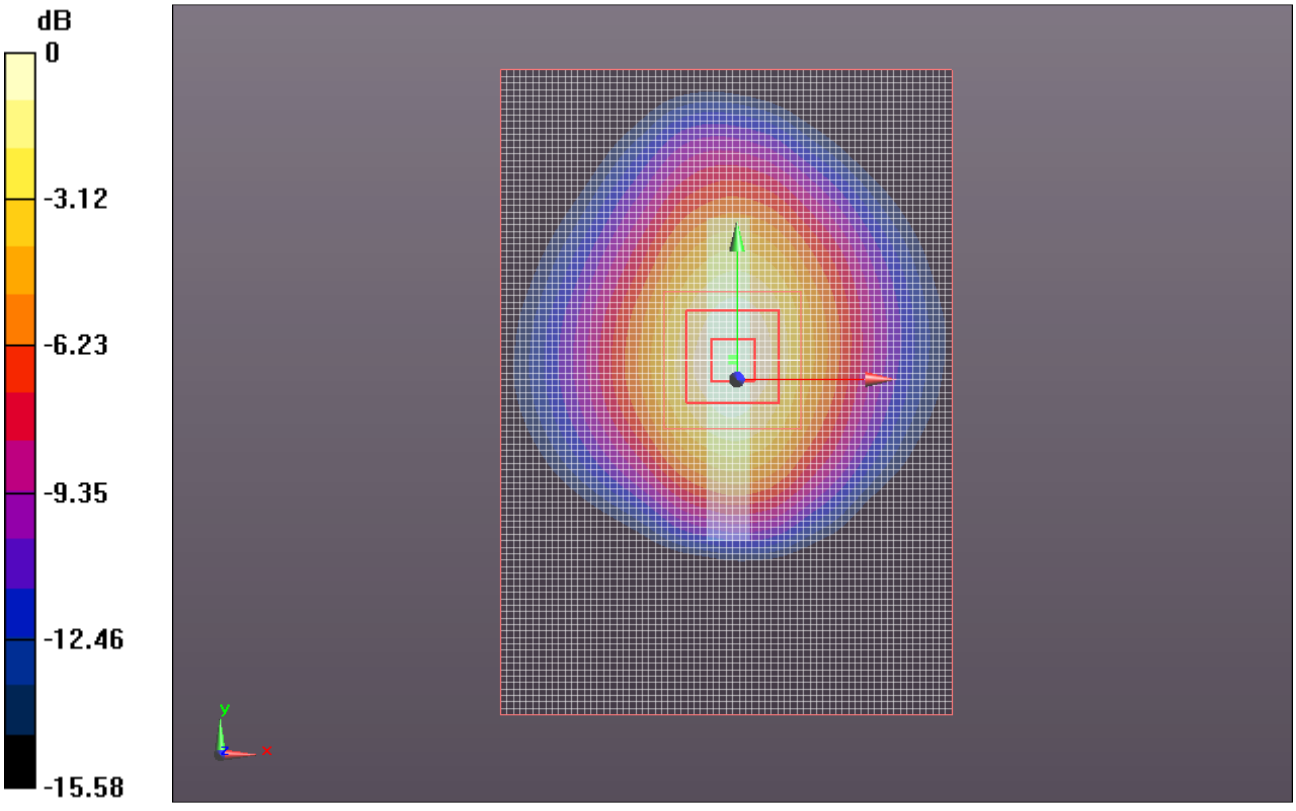
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 3MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.450 mW/g

LTE Band 4 3MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.035 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.570 W/kg
SAR(1 g) = 0.351 mW/g; SAR(10 g) = 0.208 mW/g
Maximum value of SAR (measured) = 0.446 mW/g



0 dB = 0.450mW/g

Date: 9/8/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

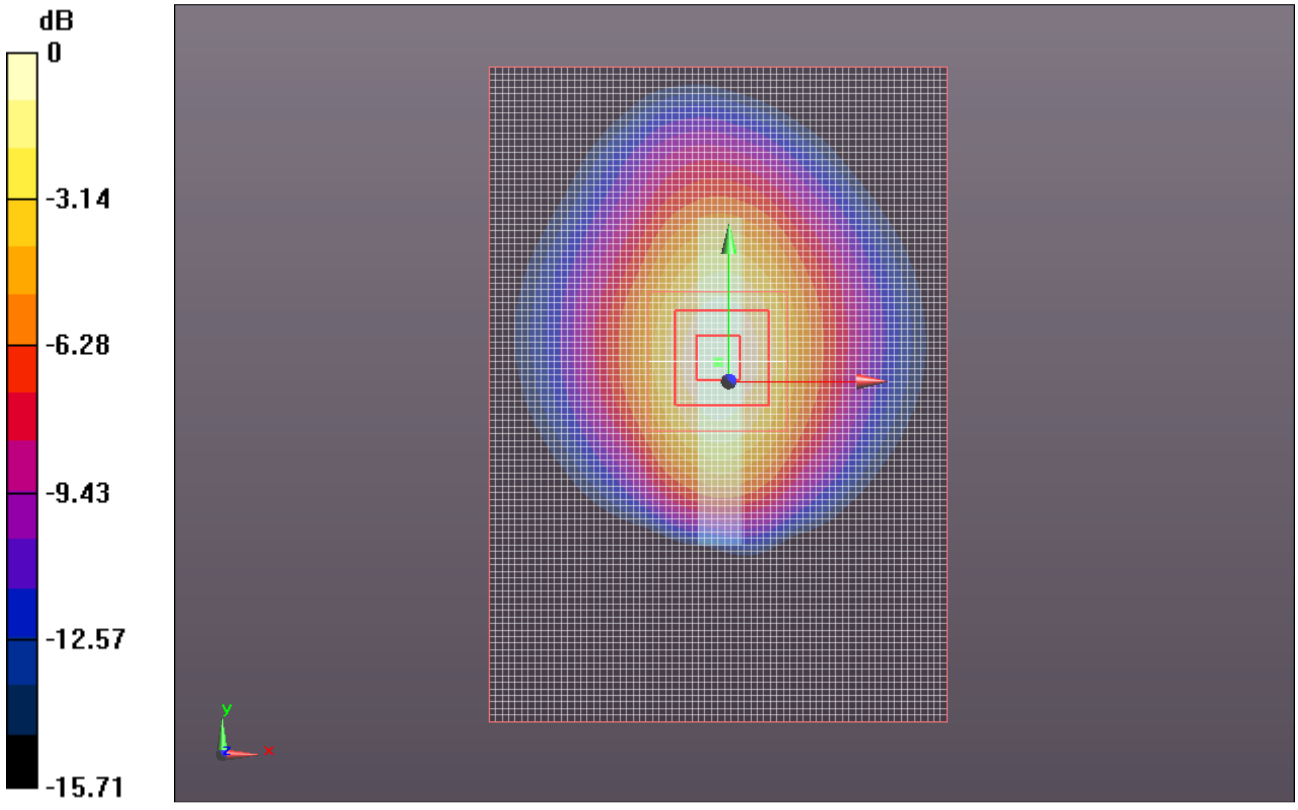
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 3MHz/QPSK__RBS#1_RBO#14_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.427 mW/g

LTE Band 4 3MHz/QPSK__RBS#1_RBO#14_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.188 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.538 W/kg
SAR(1 g) = 0.332 mW/g; SAR(10 g) = 0.196 mW/g
Maximum value of SAR (measured) = 0.422 mW/g



0 dB = 0.420mW/g

Date: 9/8/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

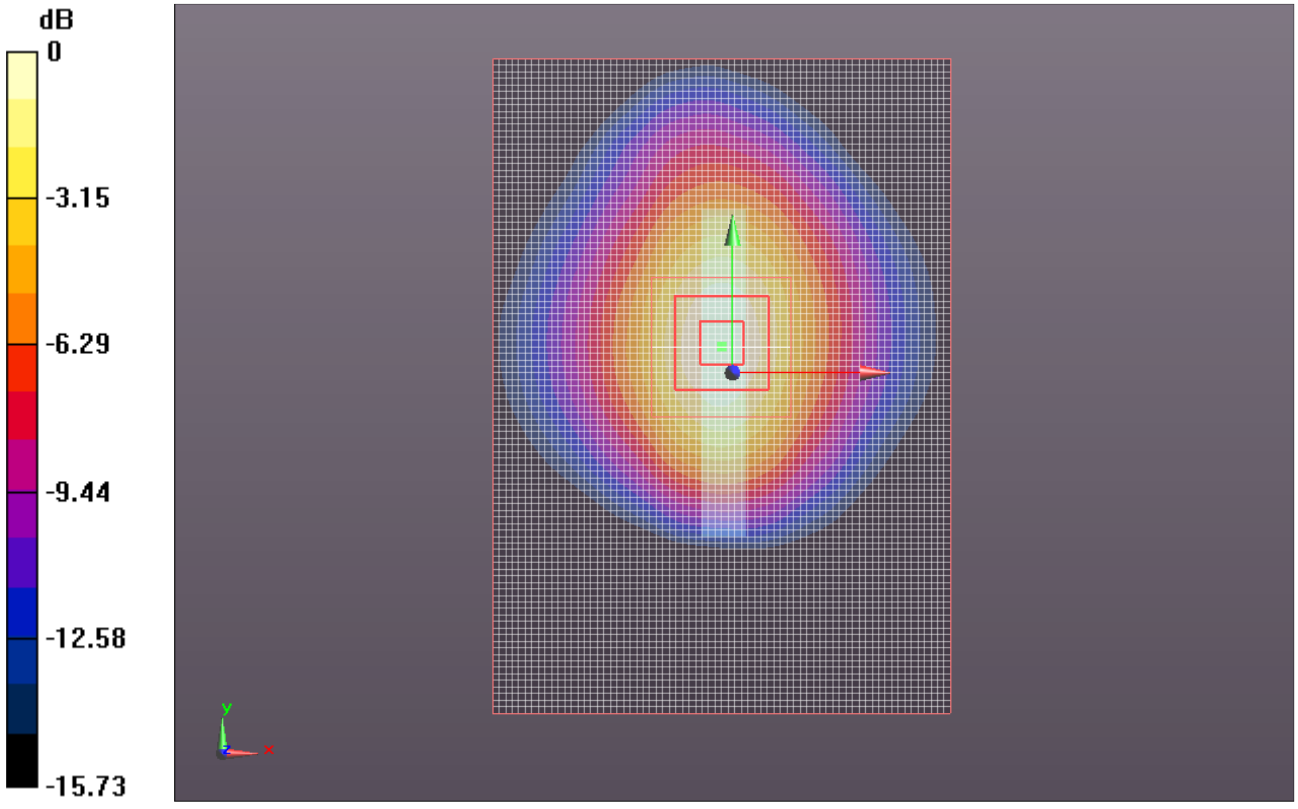
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 3MHz/16QAM__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.345 mW/g

LTE Band 4 3MHz/16QAM__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.790 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.429 W/kg
SAR(1 g) = 0.271 mW/g; SAR(10 g) = 0.161 mW/g
Maximum value of SAR (measured) = 0.341 mW/g



0 dB = 0.340mW/g

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

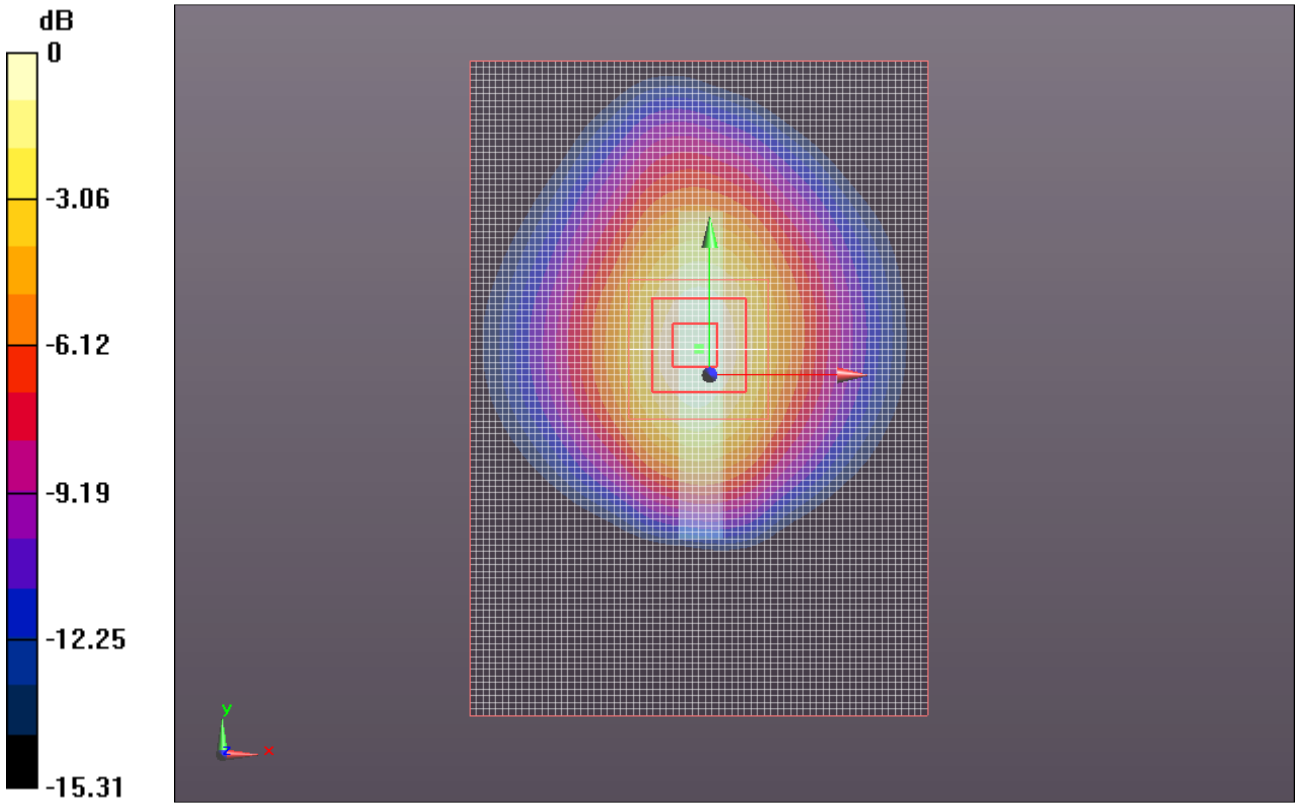
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 3MHz/16QAM__RBS#1_RBO#14_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.333 mW/g

LTE Band 4 3MHz/16QAM__RBS#1_RBO#14_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.618 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.414 W/kg
SAR(1 g) = 0.261 mW/g; SAR(10 g) = 0.155 mW/g
Maximum value of SAR (measured) = 0.327 mW/g



0 dB = 0.330mW/g

Date: 9/9/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

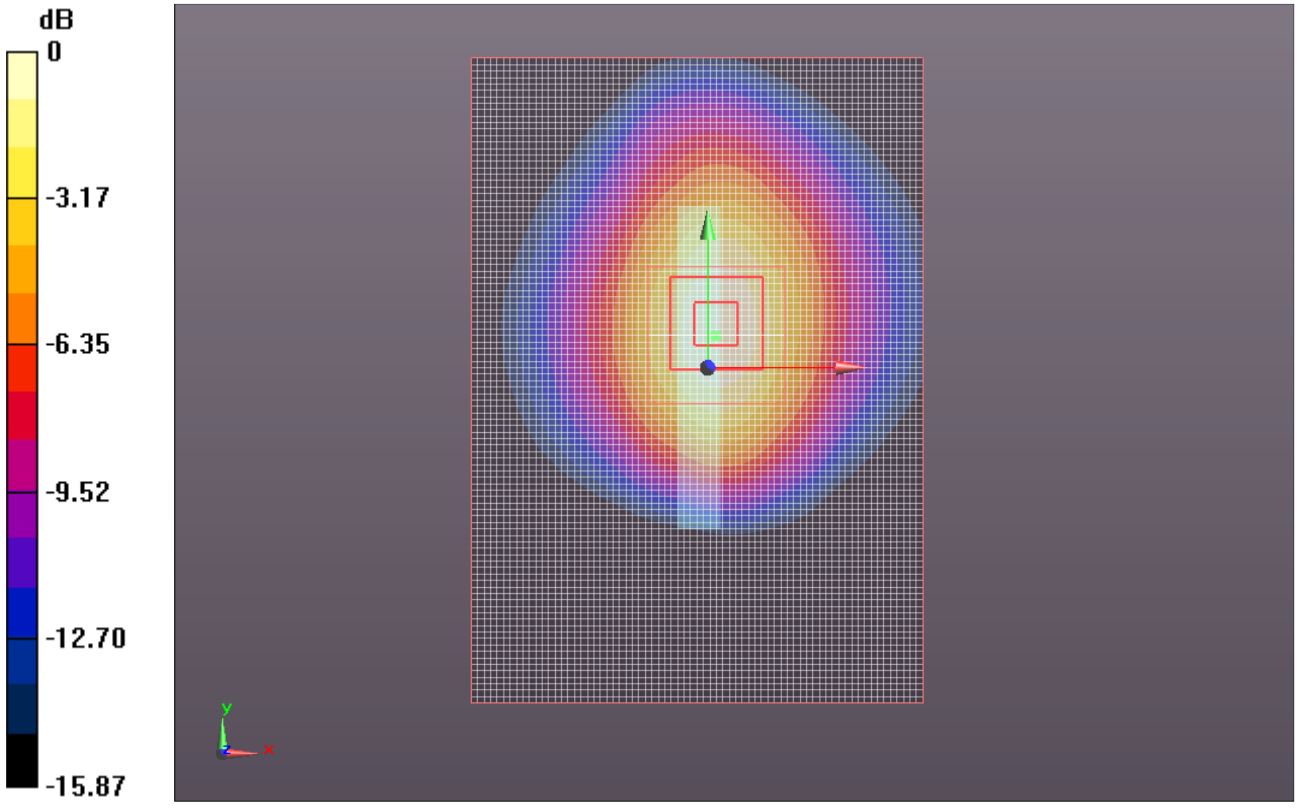
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 5MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.404 mW/g

LTE Band 4 5MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.226 V/m; Power Drift = 0.0077 dB
Peak SAR (extrapolated) = 0.508 W/kg
SAR(1 g) = 0.316 mW/g; SAR(10 g) = 0.187 mW/g
Maximum value of SAR (measured) = 0.396 mW/g



0 dB = 0.400mW/g

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

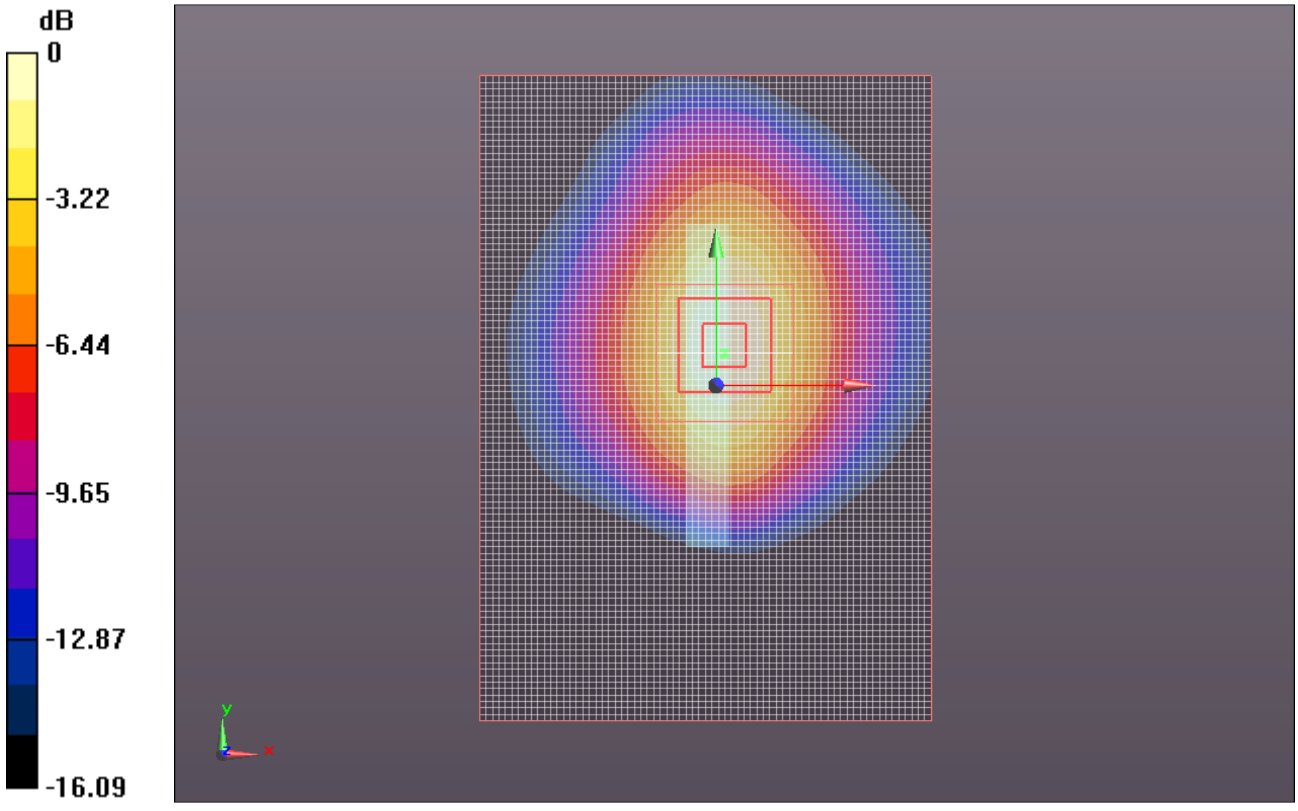
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 5MHz/QPSK__RBS#1_RBO#24_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.381 mW/g

LTE Band 4 5MHz/QPSK__RBS#1_RBO#24_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.744 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.482 W/kg
SAR(1 g) = 0.299 mW/g; SAR(10 g) = 0.177 mW/g
Maximum value of SAR (measured) = 0.377 mW/g



0 dB = 0.380mW/g

Date: 9/9/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

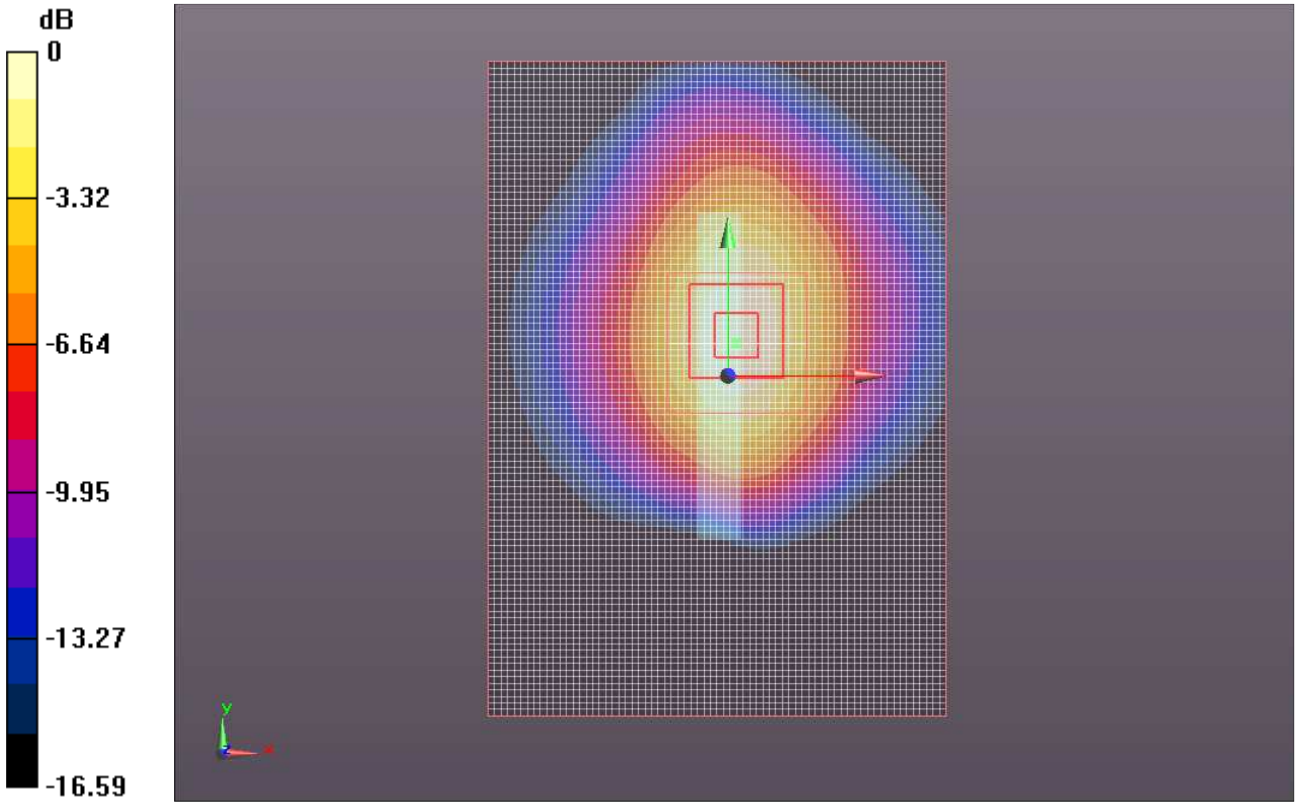
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 5MHz/16QAM__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.331 mW/g

LTE Band 4 5MHz/16QAM__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.670 V/m; Power Drift = 0.0014 dB
Peak SAR (extrapolated) = 0.420 W/kg
SAR(1 g) = 0.260 mW/g; SAR(10 g) = 0.154 mW/g
Maximum value of SAR (measured) = 0.327 mW/g



0 dB = 0.330mW/g

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

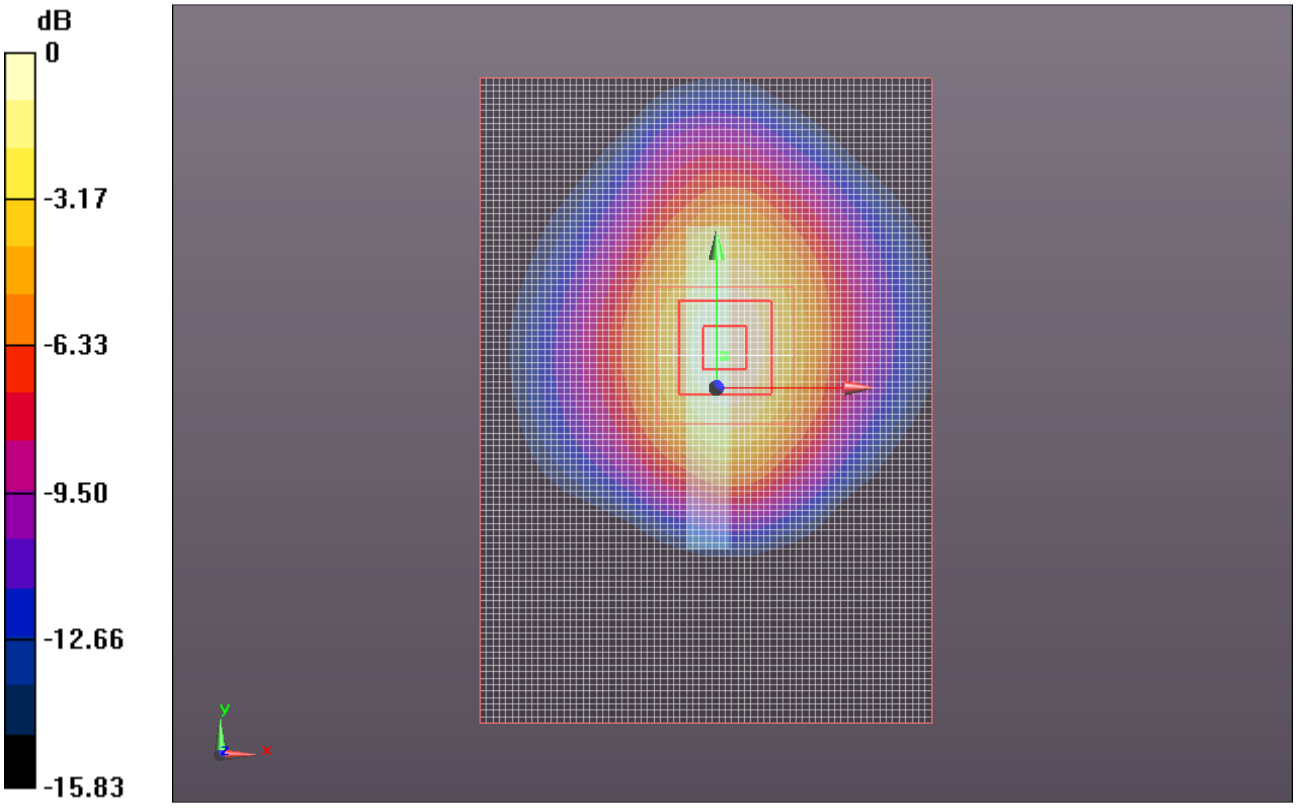
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 5MHz/16QAM__RBS#1_RBO#24_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.309 mW/g

LTE Band 4 5MHz/16QAM__RBS#1_RBO#24_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.201 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.397 W/kg
SAR(1 g) = 0.245 mW/g; SAR(10 g) = 0.145 mW/g
Maximum value of SAR (measured) = 0.307 mW/g



0 dB = 0.310mW/g

Date: 9/9/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

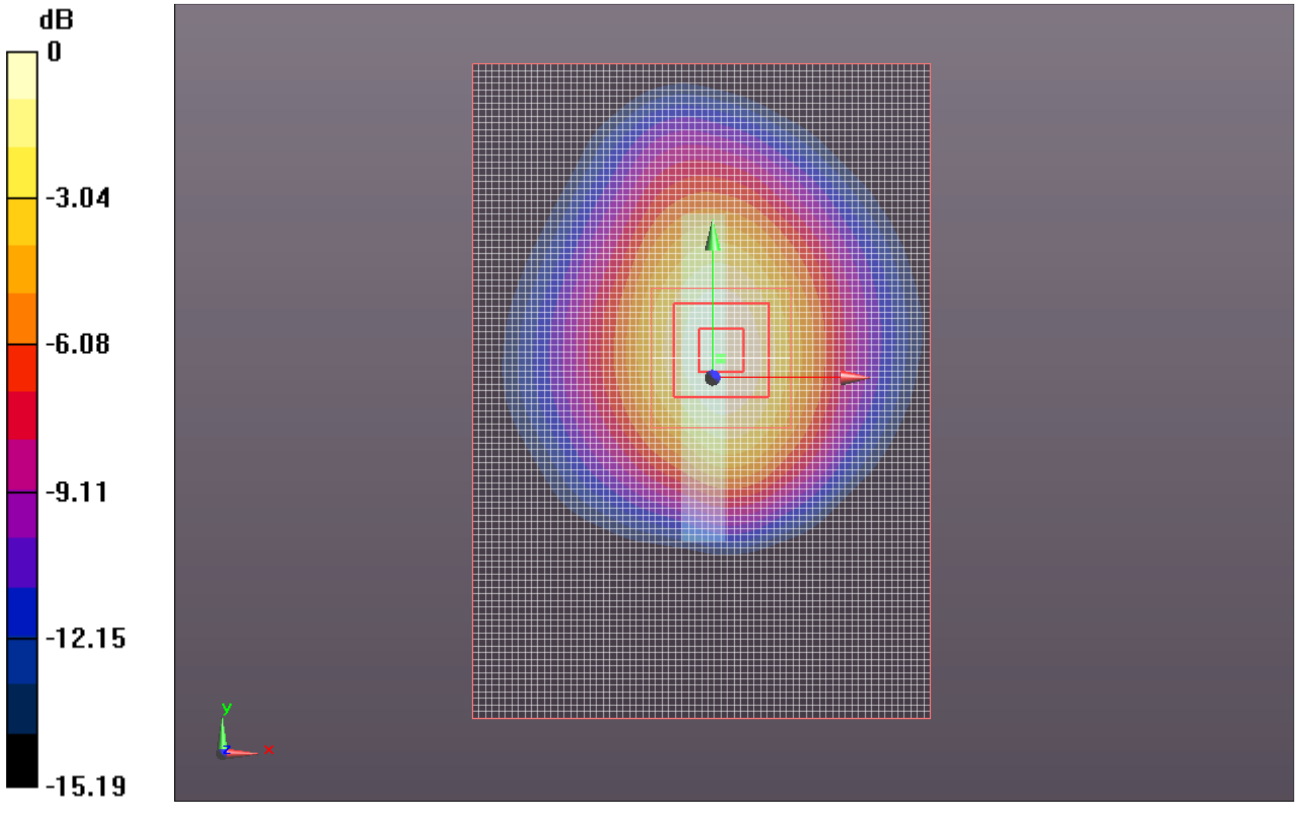
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.466 mW/g

LTE Band 4 10MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.793 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.570 W/kg
SAR(1 g) = 0.361 mW/g; SAR(10 g) = 0.215 mW/g
Maximum value of SAR (measured) = 0.449 mW/g



0 dB = 0.450mW/g

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

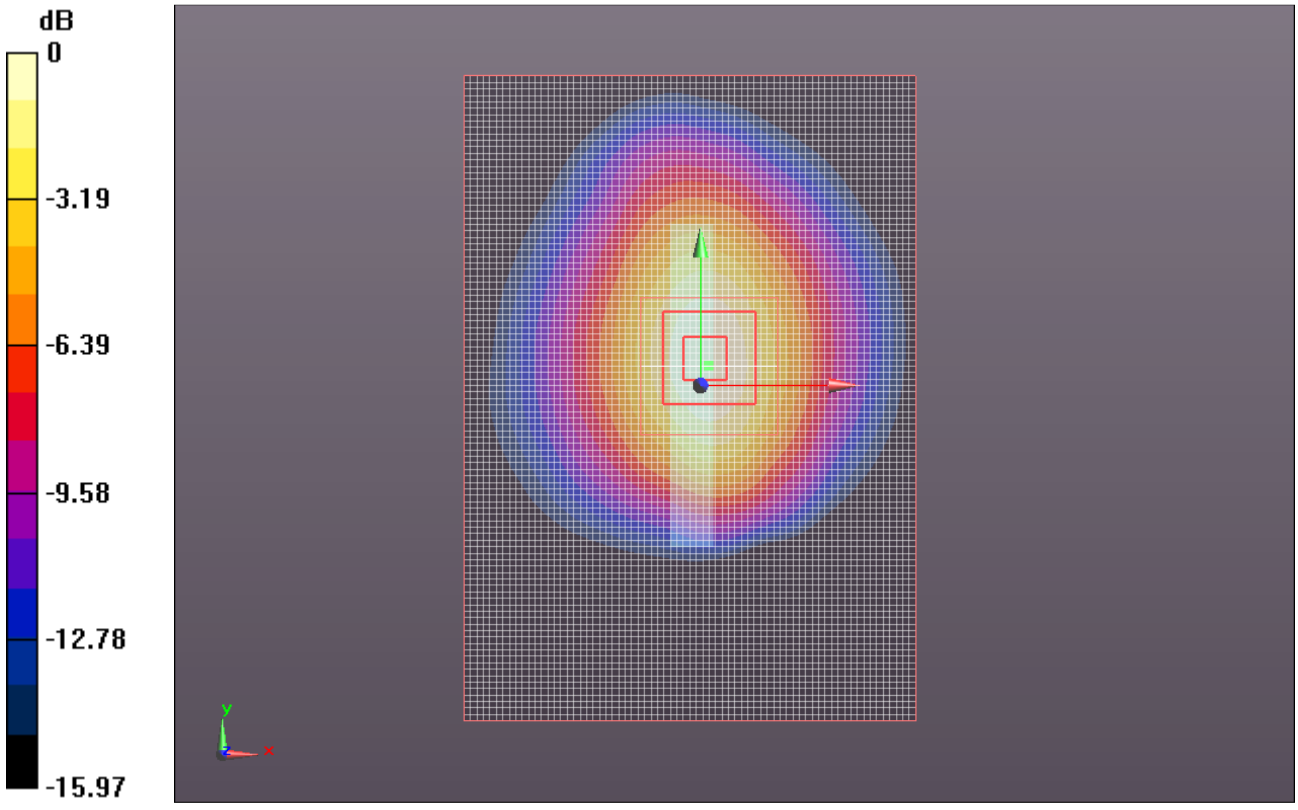
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10MHz/QPSK__RBS#1_RBO#49_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.412 mW/g

LTE Band 4 10MHz/QPSK__RBS#1_RBO#49_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.978 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.516 W/kg
SAR(1 g) = 0.321 mW/g; SAR(10 g) = 0.190 mW/g
Maximum value of SAR (measured) = 0.404 mW/g



0 dB = 0.400mW/g

Date: 9/13/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP 20110913

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.455 mho/m; ε_r = 51.902; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

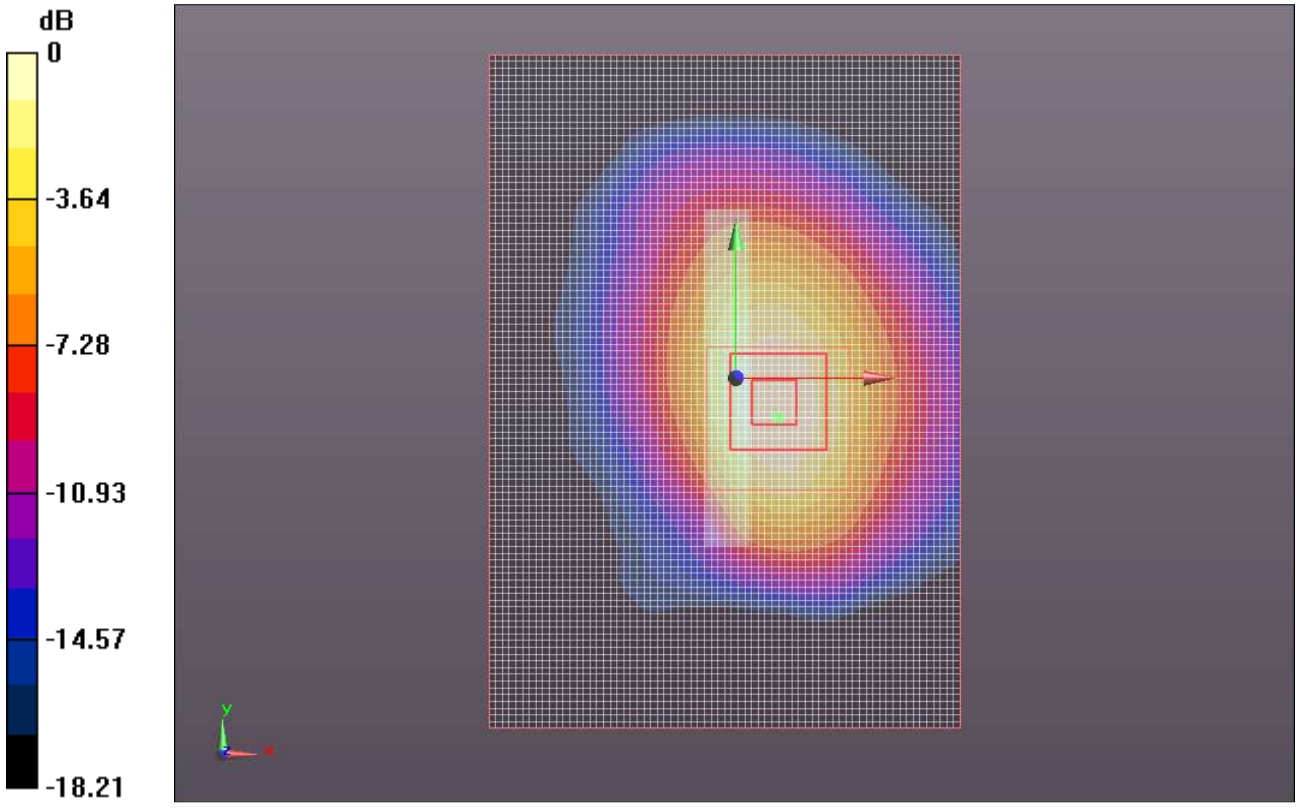
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10 MHz/QPSK__RBS#25_RBO#12_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.185 mW/g

LTE Band 4 10 MHz/QPSK__RBS#25_RBO#12_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.926 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.226 W/kg
SAR(1 g) = 0.143 mW/g; SAR(10 g) = 0.085 mW/g
Maximum value of SAR (measured) = 0.177 mW/g



0 dB = 0.180mW/g

Date: 9/13/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP 20110913

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.455 mho/m; ε_r = 51.902; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

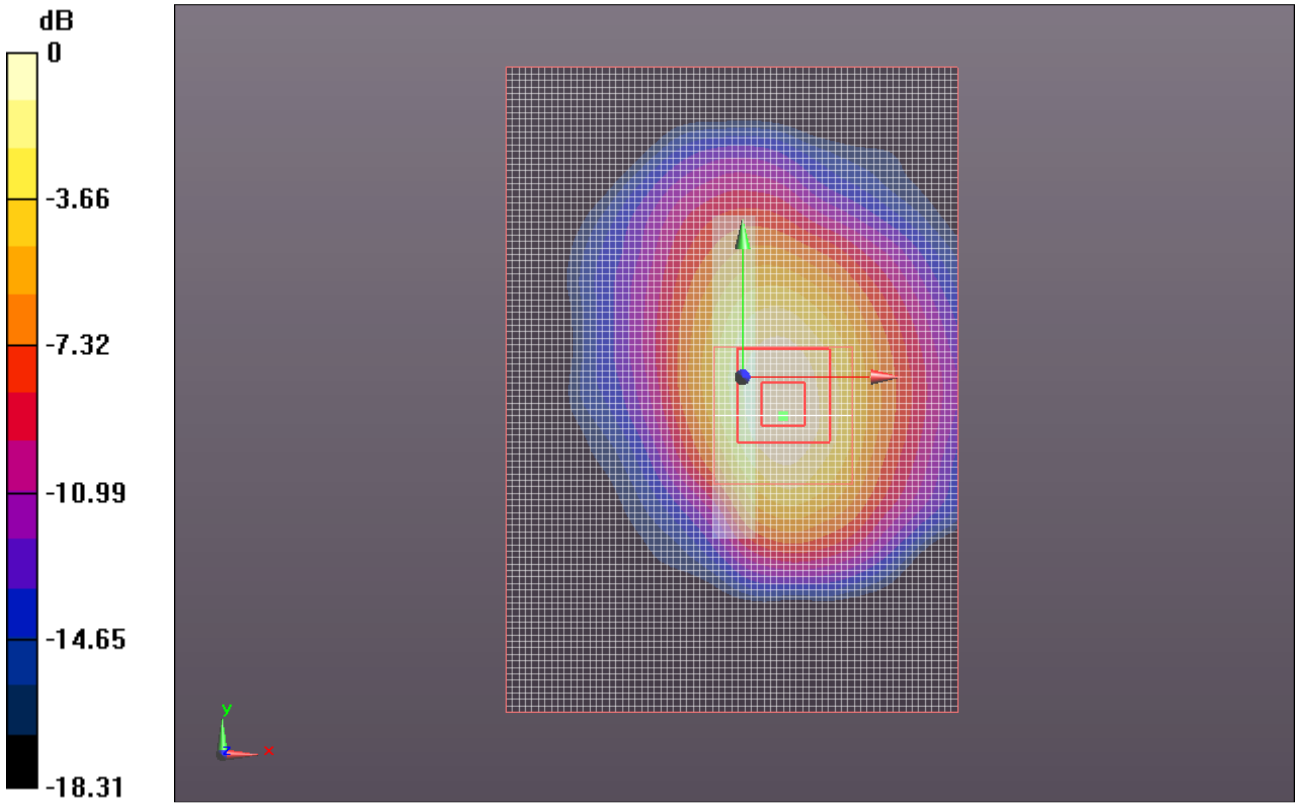
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10 MHz/QPSK__RBS#50_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.183 mW/g

LTE Band 4 10 MHz/QPSK__RBS#50_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.756 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.225 W/kg
SAR(1 g) = 0.141 mW/g; SAR(10 g) = 0.084 mW/g
Maximum value of SAR (measured) = 0.177 mW/g



0 dB = 0.180mW/g

Date: 9/9/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

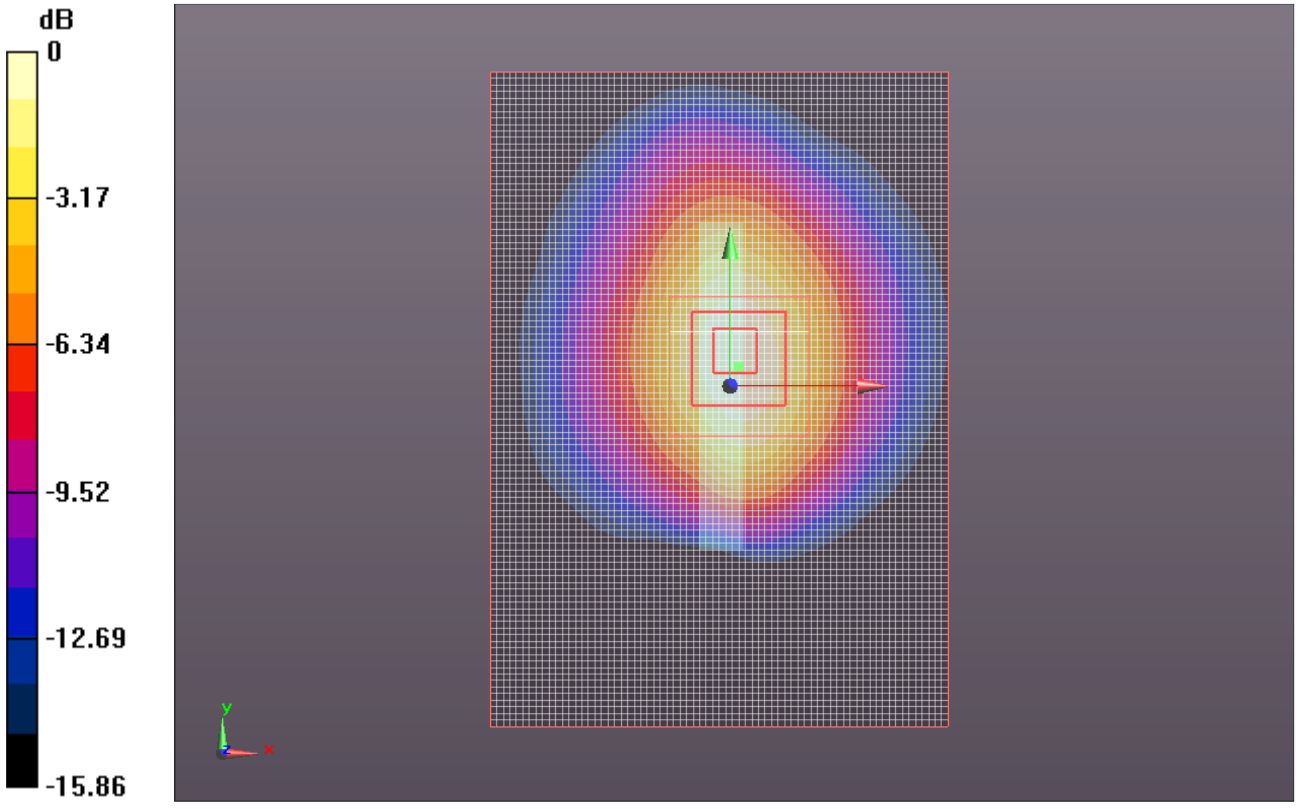
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10MHz/16QAM__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.380 mW/g

LTE Band 4 10MHz/16QAM__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.511 V/m; Power Drift = -0.20 dB
Peak SAR (extrapolated) = 0.467 W/kg
SAR(1 g) = 0.291 mW/g; SAR(10 g) = 0.170 mW/g
Maximum value of SAR (measured) = 0.368 mW/g



0 dB = 0.370mW/g

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.493 mho/m; ε_r = 52.727; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

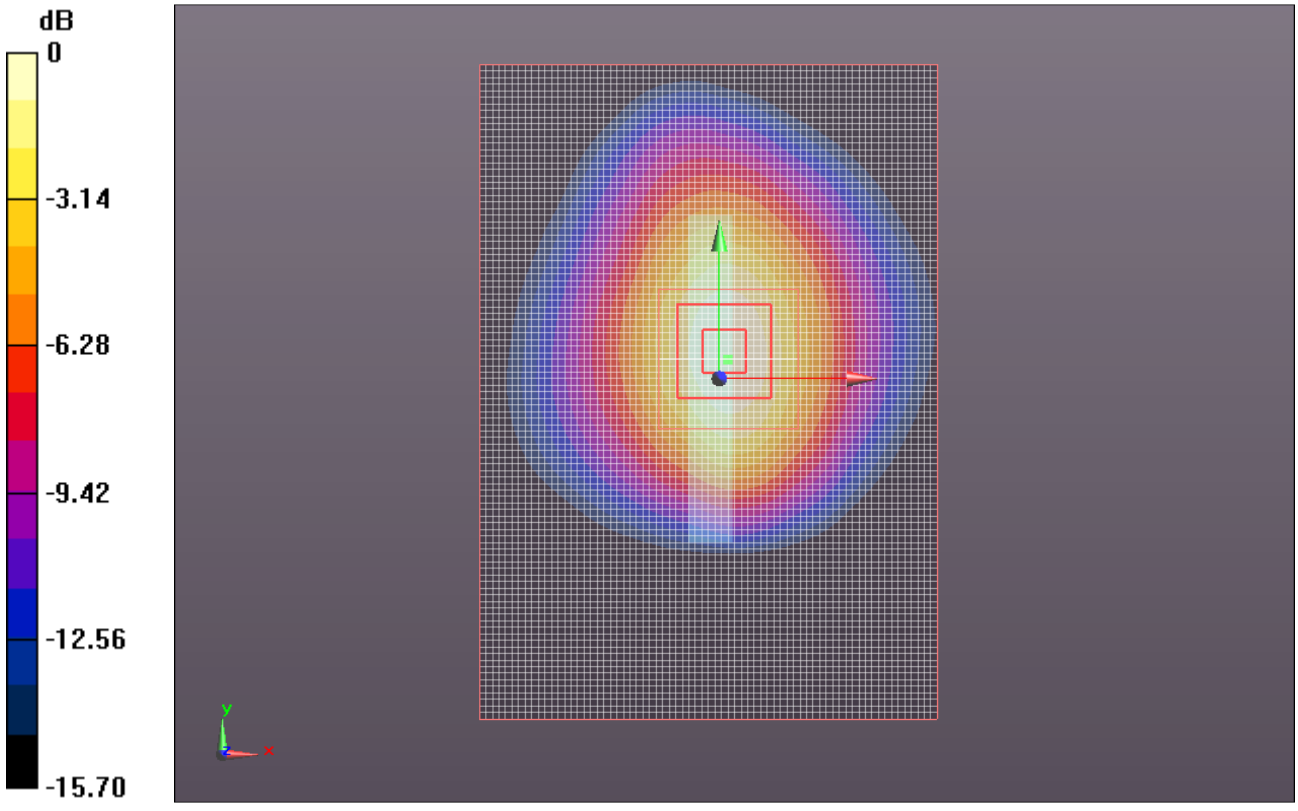
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10MHz/16QAM__RBS#1_RBO#49_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.338 mW/g

LTE Band 4 10MHz/16QAM__RBS#1_RBO#49_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.374 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.420 W/kg
SAR(1 g) = 0.262 mW/g; SAR(10 g) = 0.155 mW/g
Maximum value of SAR (measured) = 0.328 mW/g



0 dB = 0.330mW/g

Date: 9/13/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP 20110913

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.455 mho/m; ε_r = 51.902; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

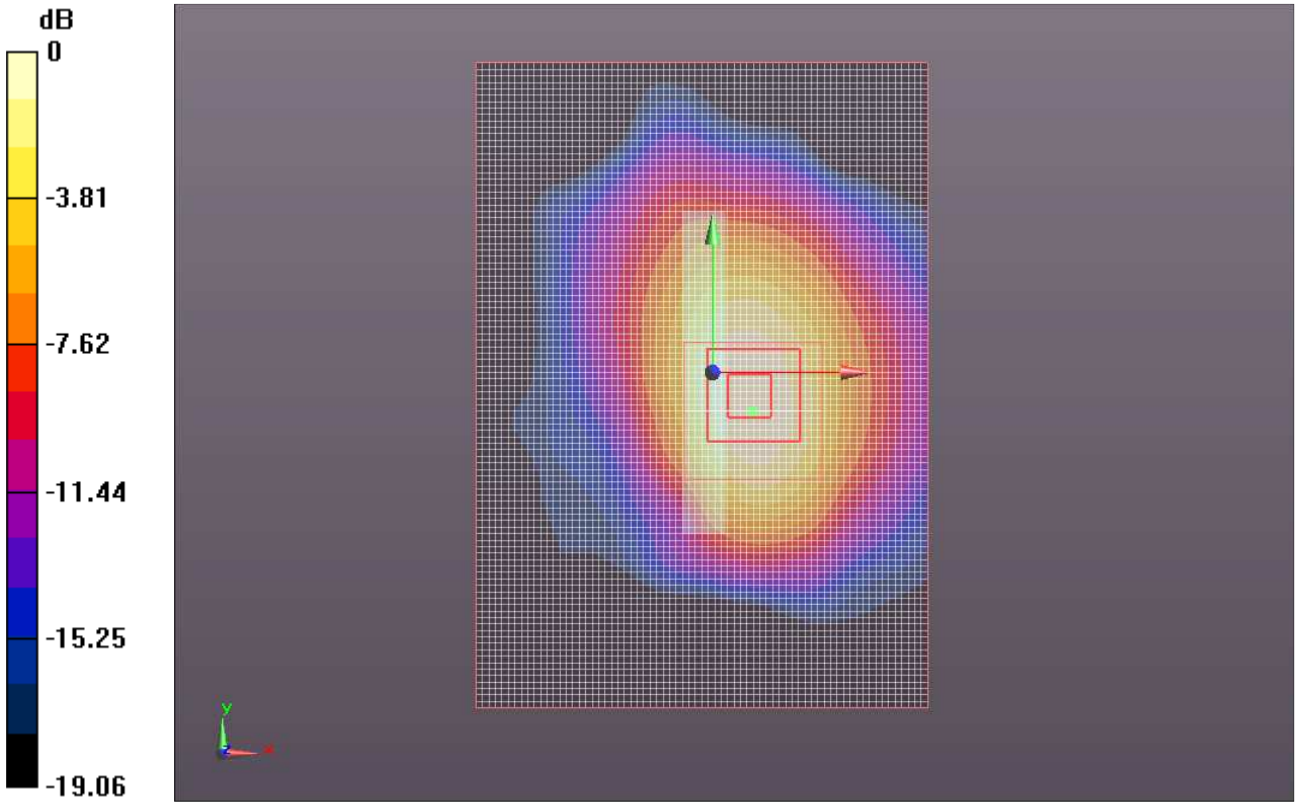
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10 MHz/16QAM__RBS#25_RBO#12_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.147 mW/g

LTE Band 4 10 MHz/16QAM__RBS#25_RBO#12_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.632 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.179 W/kg
SAR(1 g) = 0.113 mW/g; SAR(10 g) = 0.067 mW/g
Maximum value of SAR (measured) = 0.139 mW/g



0 dB = 0.140mW/g

Date: 9/13/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP 20110913

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.455 mho/m; ε_r = 51.902; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

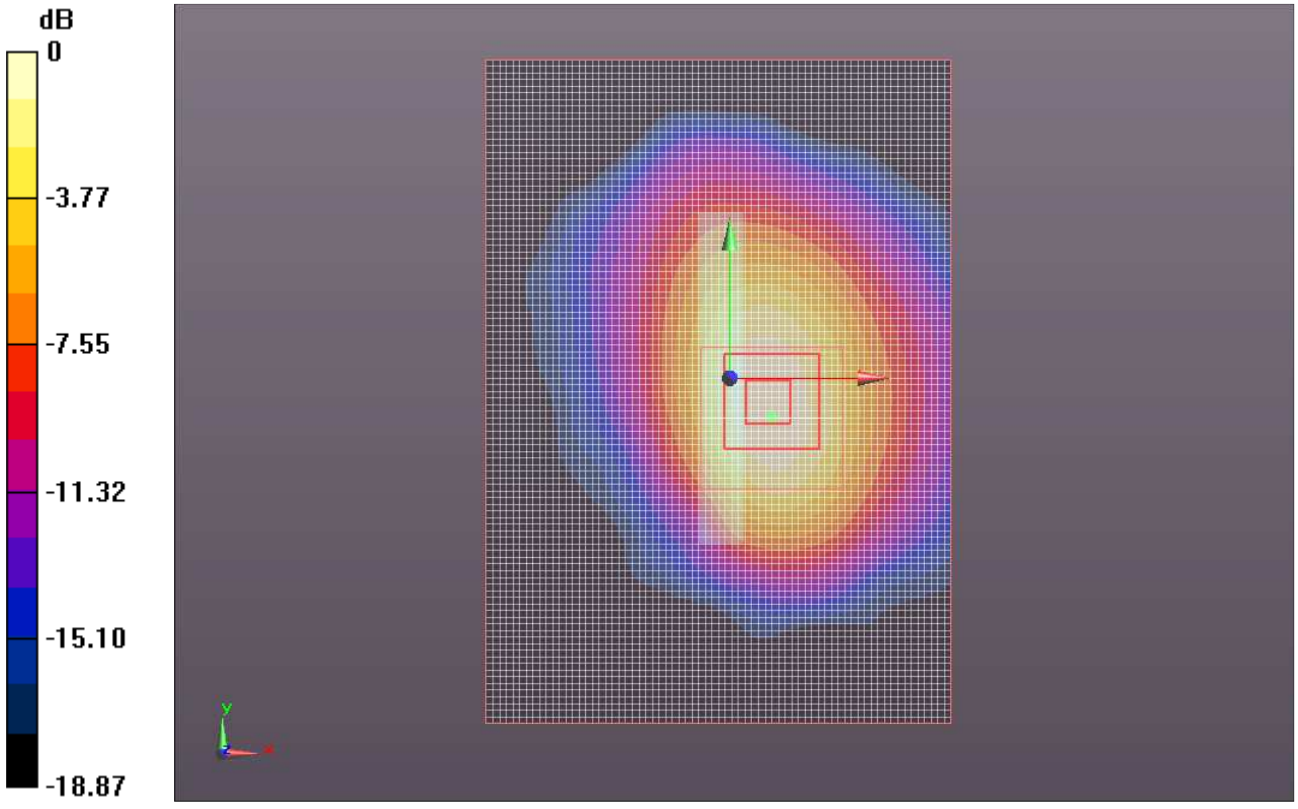
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 10 MHz/16QAM__RBS#50_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.151 mW/g

LTE Band 4 10 MHz/16QAM__RBS#50_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.871 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.189 W/kg
SAR(1 g) = 0.116 mW/g; SAR(10 g) = 0.069 mW/g
Maximum value of SAR (measured) = 0.147 mW/g



0 dB = 0.150mW/g

Date: 9/9/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.489 mho/m; ε_r = 52.593; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

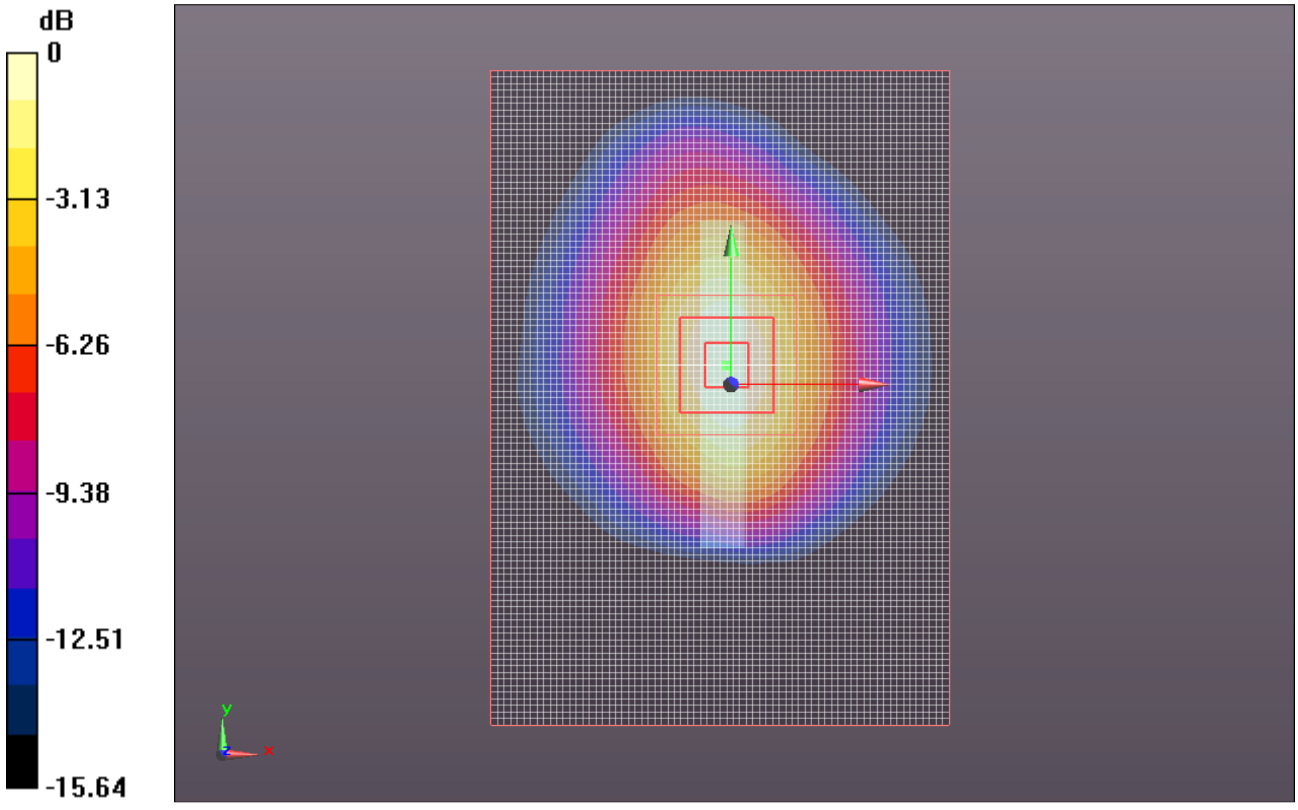
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 15MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.466 mW/g

LTE Band 4 15MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.188 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.580 W/kg
SAR(1 g) = 0.360 mW/g; SAR(10 g) = 0.213 mW/g
Maximum value of SAR (measured) = 0.454 mW/g



0 dB = 0.450mW/g

Date: 9/9/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.489 mho/m; ε_r = 52.593; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

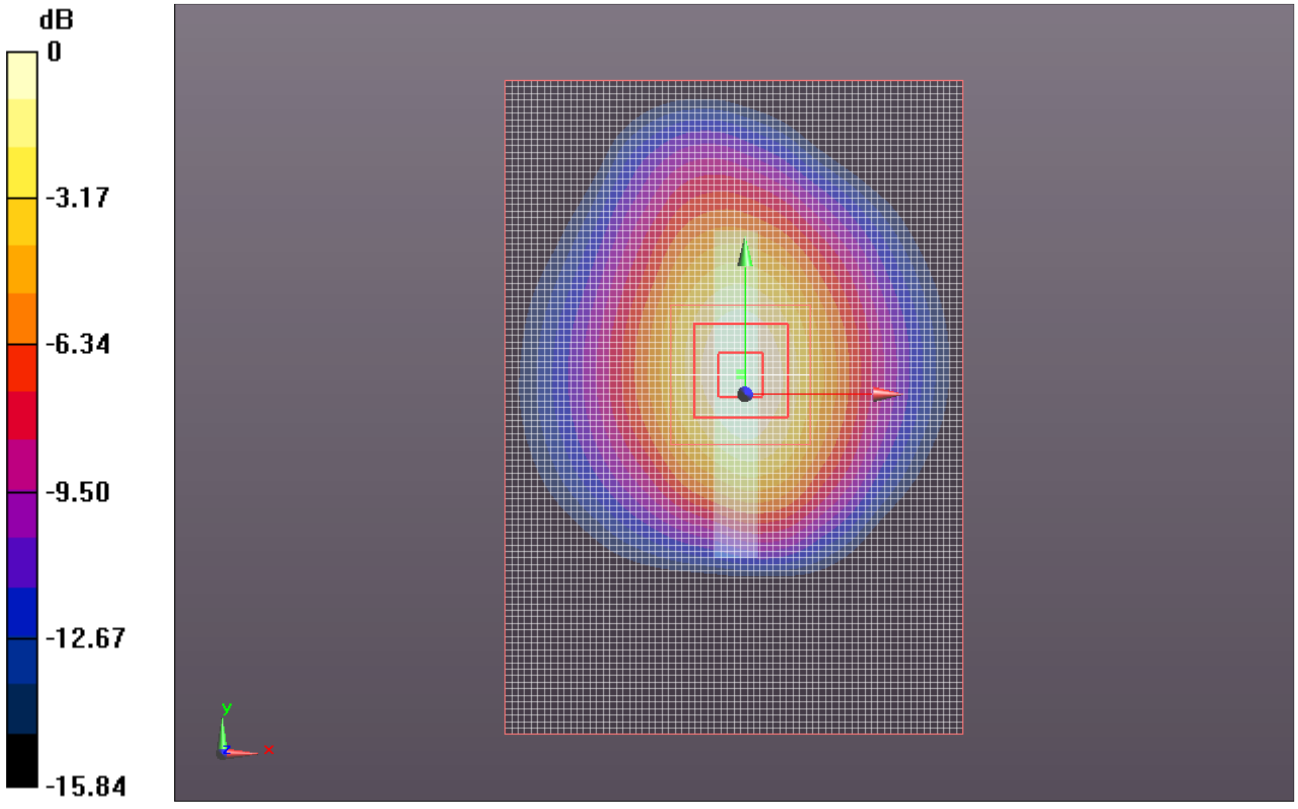
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 15MHz/QPSK__RBS#1_RBO#74_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.404 mW/g

LTE Band 4 15MHz/QPSK__RBS#1_RBO#74_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.019 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.500 W/kg
SAR(1 g) = 0.312 mW/g; SAR(10 g) = 0.185 mW/g
Maximum value of SAR (measured) = 0.394 mW/g



0 dB = 0.390mW/g

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.489 mho/m; ε_r = 52.593; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

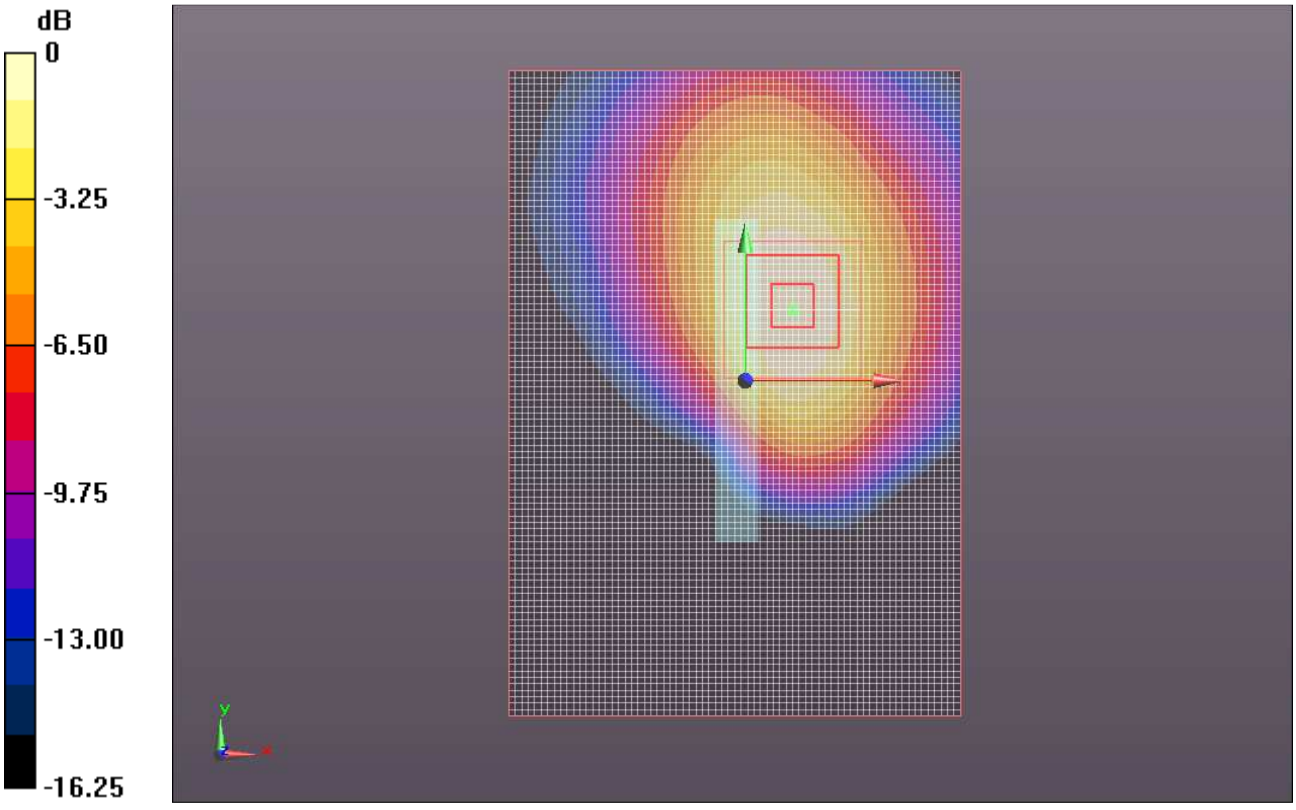
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 15MHz/16QAM__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.313 mW/g

LTE Band 4 15MHz/16QAM__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.578 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.375 W/kg
SAR(1 g) = 0.242 mW/g; SAR(10 g) = 0.149 mW/g
Maximum value of SAR (measured) = 0.299 mW/g



0 dB = 0.300mW/g

Date: 9/10/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.489 mho/m; ε_r = 52.593; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

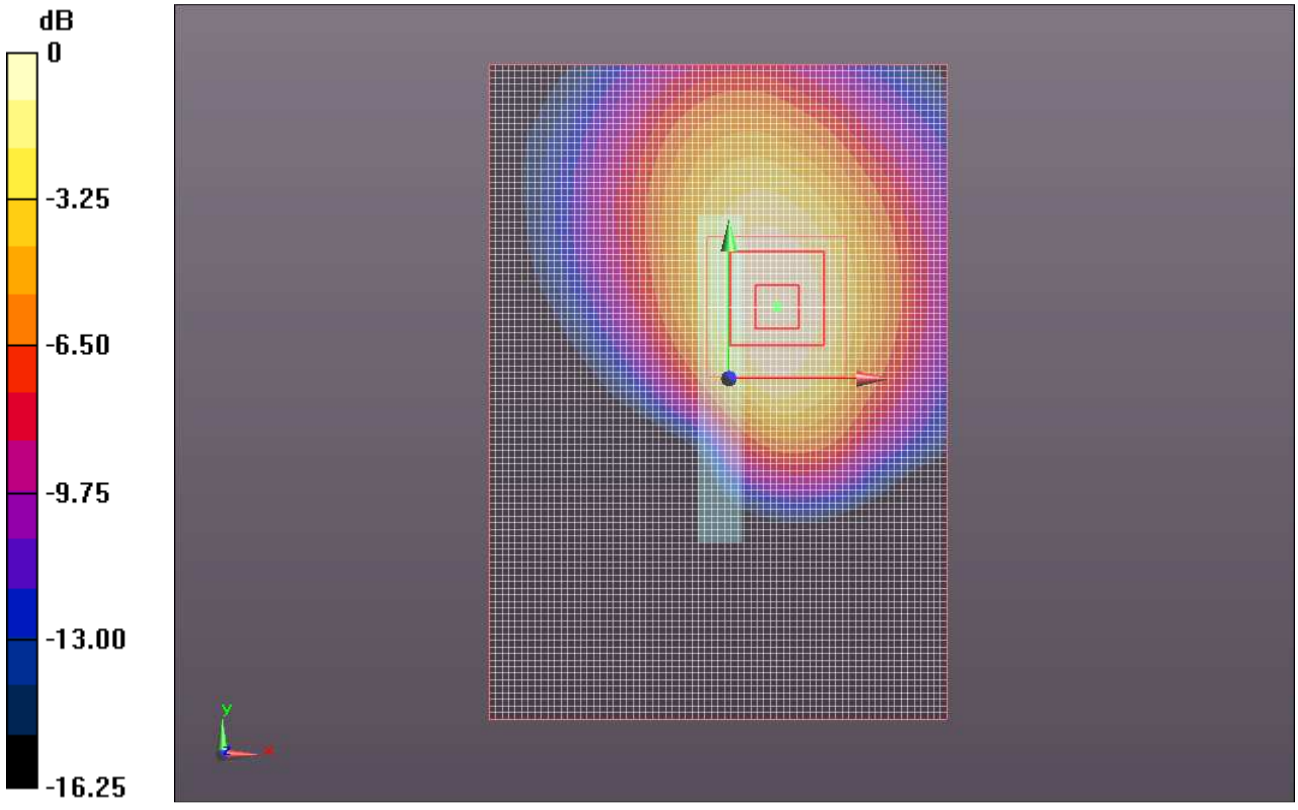
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 15MHz/16QAM__RBS#1_RBO#74_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.318 mW/g

LTE Band 4 15MHz/16QAM__RBS#1_RBO#74_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.544 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.394 W/kg
SAR(1 g) = 0.249 mW/g; SAR(10 g) = 0.151 mW/g
Maximum value of SAR (measured) = 0.310 mW/g



0 dB = 0.310mW/g

Date: 9/9/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.489 mho/m; ε_r = 52.593; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

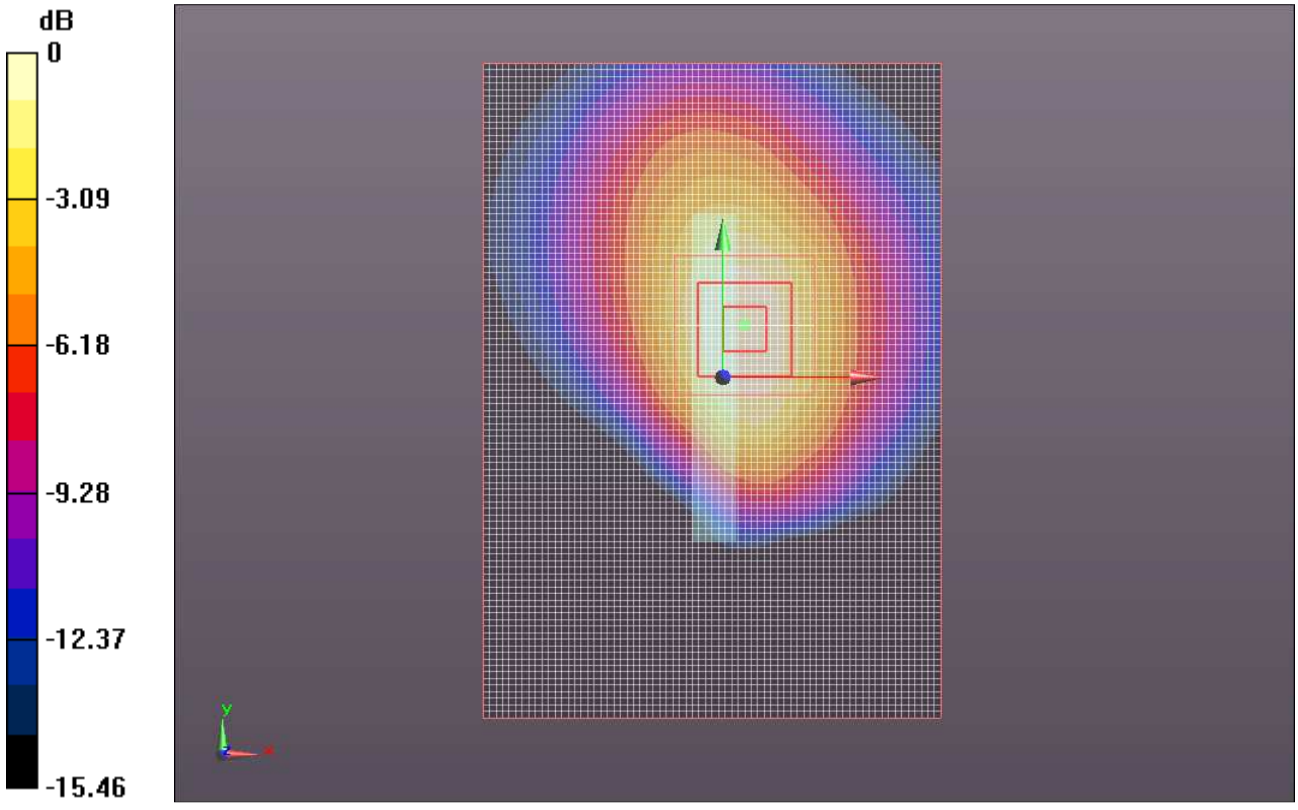
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 20MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.444 mW/g

LTE Band 4 20MHz/QPSK__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.061 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.540 W/kg
SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.207 mW/g
Maximum value of SAR (measured) = 0.429 mW/g



0 dB = 0.430mW/g

Date: 9/9/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.489 mho/m; ε_r = 52.593; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

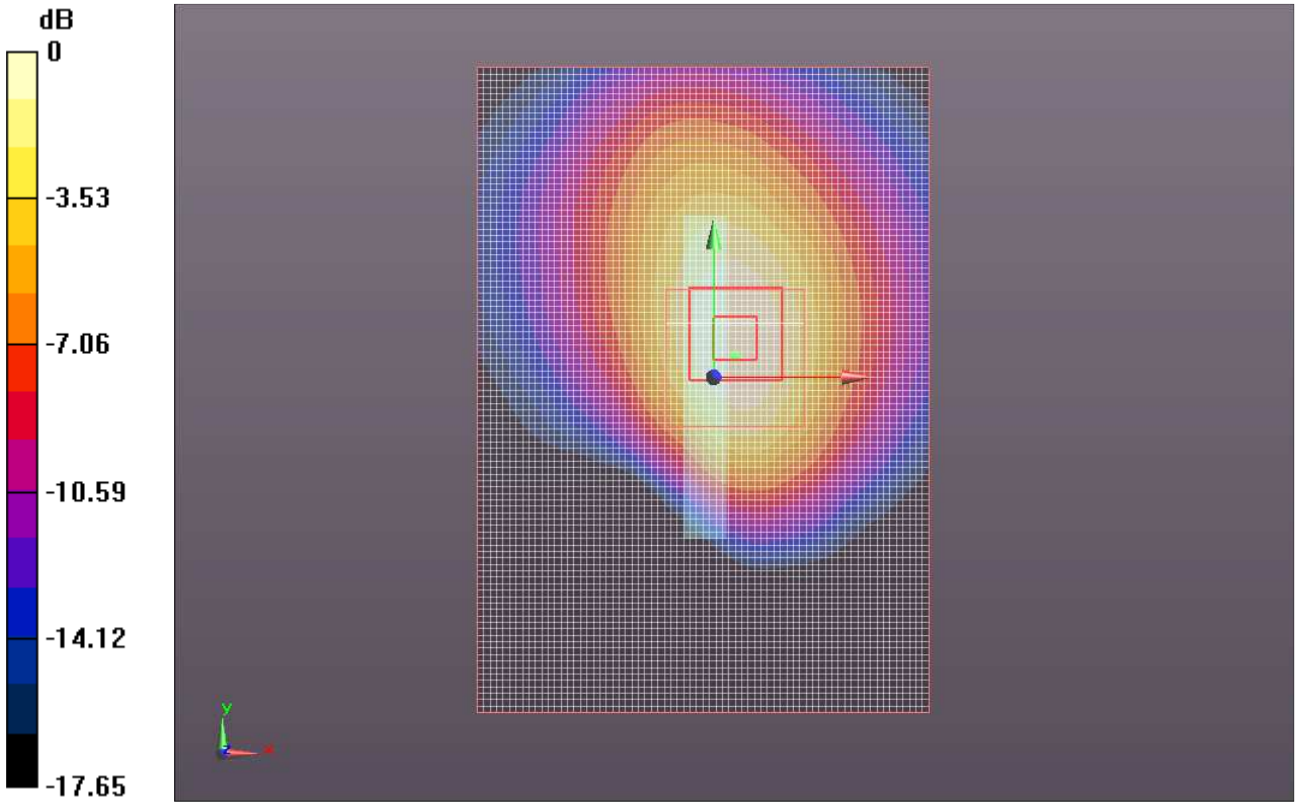
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 20MHz/QPSK__RBS#1_RBO#99_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.451 mW/g

LTE Band 4 20MHz/QPSK__RBS#1_RBO#99_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.335 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.557 W/kg
SAR(1 g) = 0.354 mW/g; SAR(10 g) = 0.214 mW/g
Maximum value of SAR (measured) = 0.437 mW/g



0 dB = 0.440mW/g

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.489 mho/m; ε_r = 52.593; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

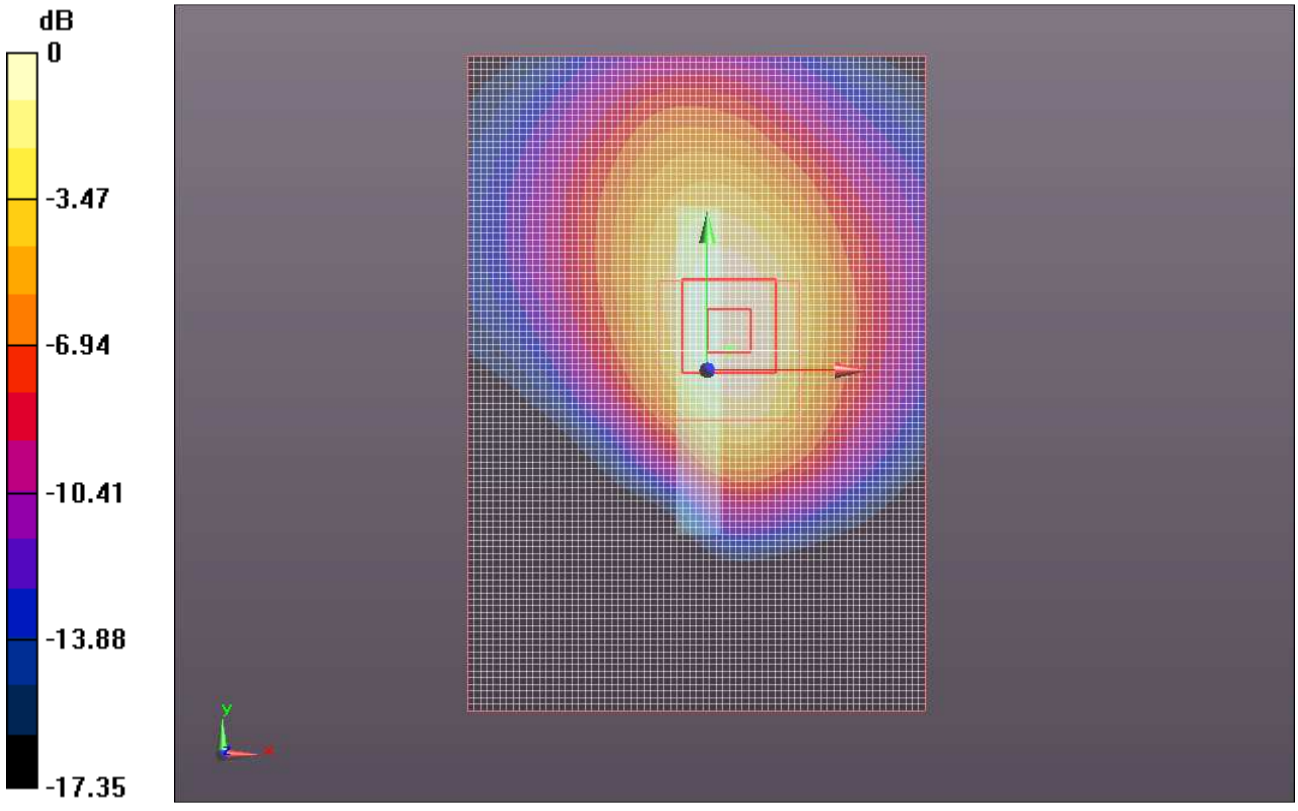
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 20MHz/16QAM__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.357 mW/g

LTE Band 4 20MHz/16QAM__RBS#1_RBO#0_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.502 V/m; Power Drift = -0.00087 dB
Peak SAR (extrapolated) = 0.448 W/kg
SAR(1 g) = 0.282 mW/g; SAR(10 g) = 0.171 mW/g
Maximum value of SAR (measured) = 0.348 mW/g



0 dB = 0.350mW/g

Date: 9/10/2011

Test Laboratory: UL CCS SAR Lab B

1_Horizontal Ant_UP

Communication System: LTE; Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.489 mho/m; ε_r = 52.593; ρ = 1000 kg/m^3
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

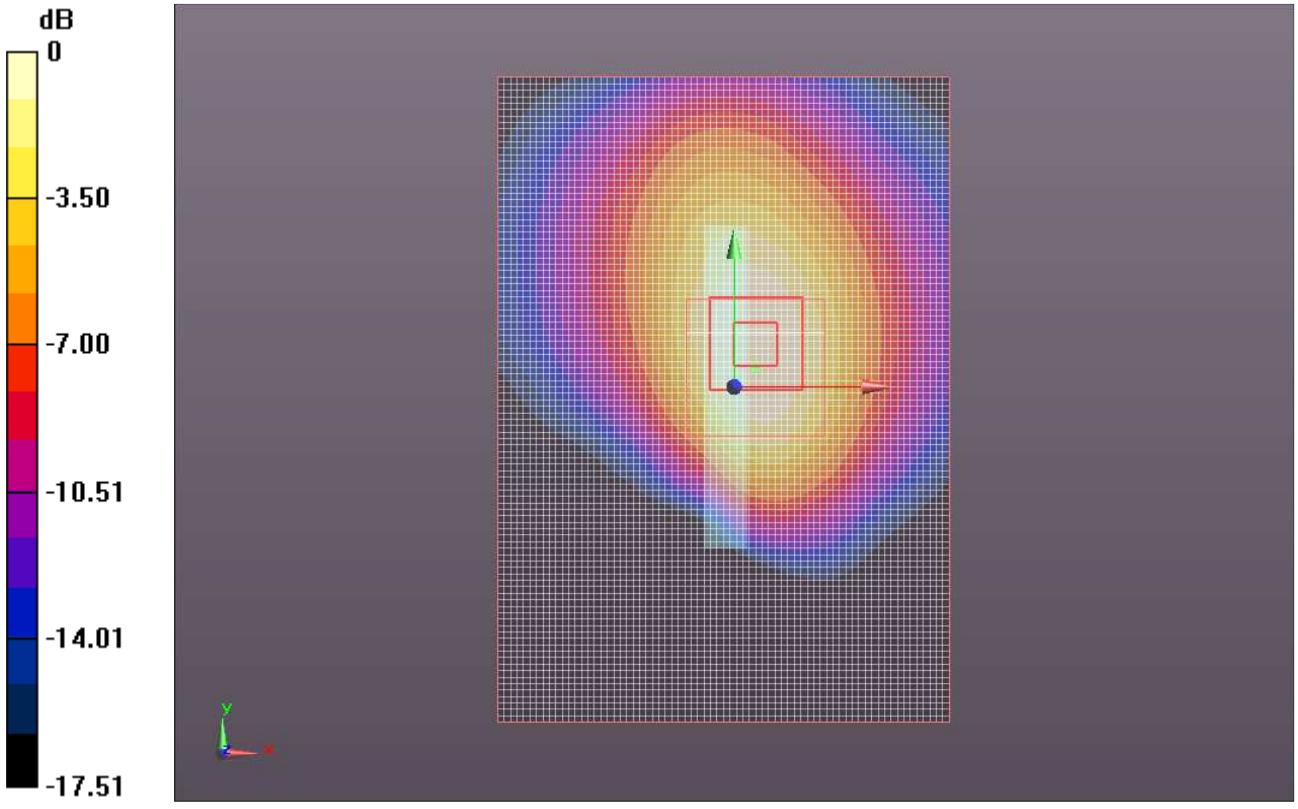
DASY5 Configuration:
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3773; ConvF(7.72, 7.72, 7.72); Calibrated: 5/3/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1258; Calibrated: 5/2/2011
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1118
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

LTE Band 4 20MHz/16QAM__RBS#1_RBO#99_Main_Ant_M-CH_20MM/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.374 mW/g

LTE Band 4 20MHz/16QAM__RBS#1_RBO#99_Main_Ant_M-CH_20MM/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.593 V/m; Power Drift = 0.00069 dB
Peak SAR (extrapolated) = 0.450 W/kg
SAR(1 g) = 0.286 mW/g; SAR(10 g) = 0.173 mW/g
Maximum value of SAR (measured) = 0.353 mW/g



0 dB = 0.350mW/g