

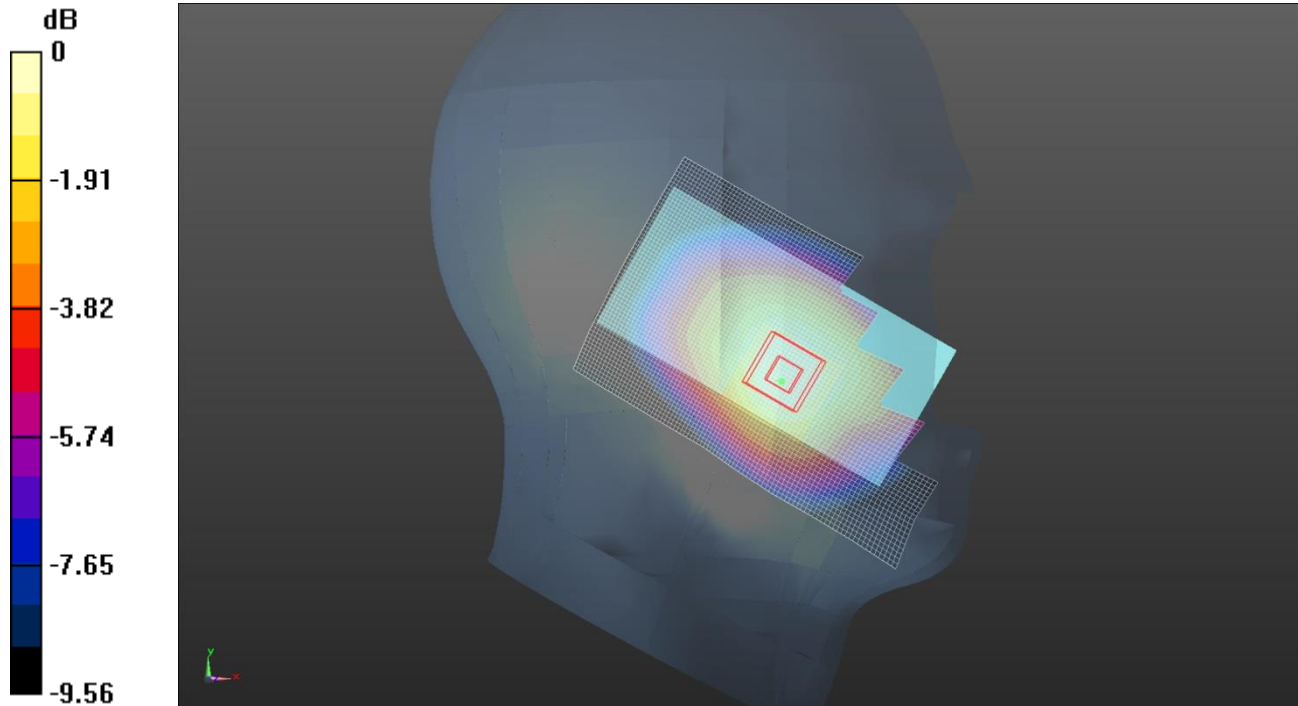
## 12.8. Baseline Plots

### 12.8.1. Baseline Plots – A1428

#### Touch Left of EUT GSM 850 CH190 - UL VS Ltd

Date: 14/10/2014

DUT: A1428



Communication System: UID 0, Generic GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042  
 Medium: 900 MHz HSL Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.901$  S/m;  $\epsilon_r = 41.982$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Left Section  
 DASY4 Configuration:  
 - Probe: EX3DV4 - SN3995; ConvF(9.99, 9.99, 9.99); Calibrated: 9/5/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE4 Sn1438; Calibrated: 12/5/2014  
 - Phantom: SAM (20deg probe tilt) with CRP v4.0; Type: QD000P40CC; Serial: TP:xxxx  
 - ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Touch Left - Middle/Area Scan (61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.601 W/kg

**Configuration/Touch Left - Middle/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.535 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.676 W/kg

**SAR(1 g) = 0.562 W/kg; SAR(10 g) = 0.432 W/kg**

Maximum value of SAR (measured) = 0.587 W/kg

Touch Left of EUT GSM 850 CH190 - Extract from Original Report

Test Laboratory: UL CCS SAR Lab C Date: 7/1/2012

**GSM850 (Primary Antenna)**

Frequency: 836.6 MHz; Duty Cycle: 1:8.00018; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
 Medium parameters used (interpolated):  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.879 \text{ mho/m}$ ;  $\epsilon_r = 41.731$ ;  $\rho = 1000 \text{ kg/m}^3$   
 DASY5 Configuration:  
 - Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg  
 - Electronics: DAE4 Sn1239; Calibrated: 6/6/2012  
 - Probe: EX3DV4 - SN3751; ConvF(8.35, 8.35, 8.35); Calibrated: 12/19/2011  
 - Sensor-Surface: 2.5mm (Mechanical Surface Detection)  
 - Phantom: SAM; Type: QD00P40CD; Serial: 1632

**LHS/Touch\_Voice\_ch 190/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm  
 Info: Interpolated medium parameters used for SAR evaluation.  
 Maximum value of SAR (measured) = 0.758 mW/g

**LHS/Touch\_Voice\_ch 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 29.680 V/m; Power Drift = 0.05 dB  
 Peak SAR (extrapolated) = 0.8570  
**SAR(1 g) = 0.716 mW/g; SAR(10 g) = 0.553 mW/g**  
 Info: Interpolated medium parameters used for SAR evaluation.  
 Maximum value of SAR (measured) = 0.776 mW/g

0 dB = 0.780mW/g = -2.16 dB mW/g

Back of EUT PCS 1900 GPRS 2Tx CH810 - UL VS Ltd

Date: 15/10/2014  
**DUT: A1428**



Communication System: UID 0, GPRS 1900 2Tx; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
 Medium: 1900 MHz MSL Medium parameters used (interpolated):  $f = 1909.8$  MHz;  $\sigma = 1.547$  S/m;  $\epsilon_r = 52.626$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 DASY4 Configuration:  
 - Probe: ET3DV6 - SN1529; ConvF(4.46, 4.46, 4.46); Calibrated: 22/5/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE3 Sn394; Calibrated: 16/5/2014  
 - Phantom: SAM 12b (Site 56); Type: SAM 4.0; Serial: TP:1192  
 - ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Back of the EUT Facing the Phantom - High/Area Scan (61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.970 W/kg

**Configuration/Back of the EUT Facing the Phantom - High/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.32 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.39 W/kg

**SAR(1 g) = 0.792 W/kg; SAR(10 g) = 0.449 W/kg**

Maximum value of SAR (measured) = 0.883 W/kg

Back of EUT PCS 1900 GPRS 2Tx CH810 - Extract from Original Report

Test Laboratory: UL CCS SAR Lab B Date: 7/7/2012

**GSM1900 (Primary Antenna)**

Frequency: 1909.8 MHz; Duty Cycle: 1:4.00037; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.529$  mho/m;  $\epsilon_r = 51.599$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1259; Calibrated: 2/13/2012
- Probe: EX3DV4 - SN3688; ConvF(7.04, 7.04, 7.04); Calibrated: 2/16/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Phantom: ELI v5.0 (A); Type: QDOVA001BB; Serial: 1117

**Rear/GPRS 2 slots\_ch 810/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.46 mW/g

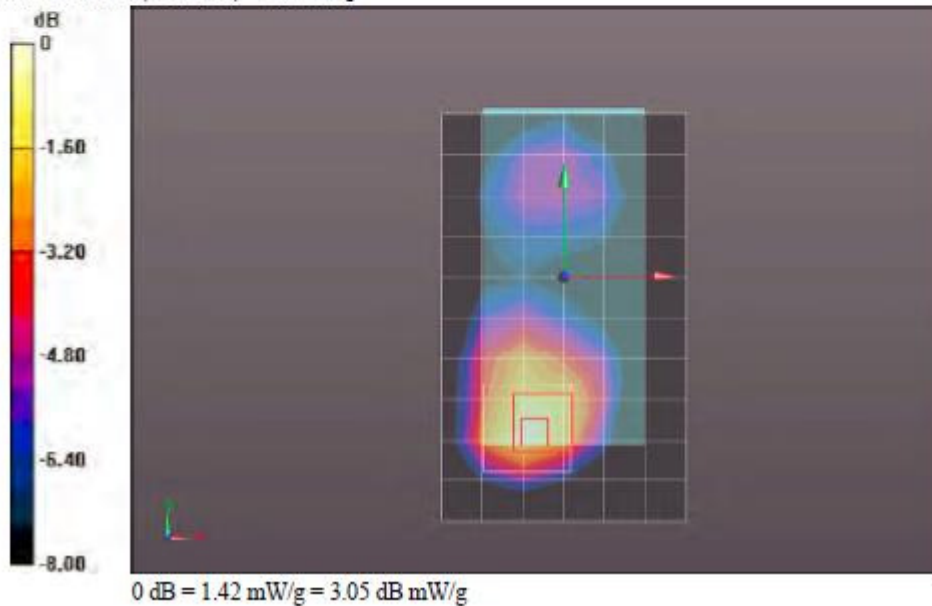
**Rear/GPRS 2 slots\_ch 810/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 31.314 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.988 mW/g

**SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.609 mW/g**

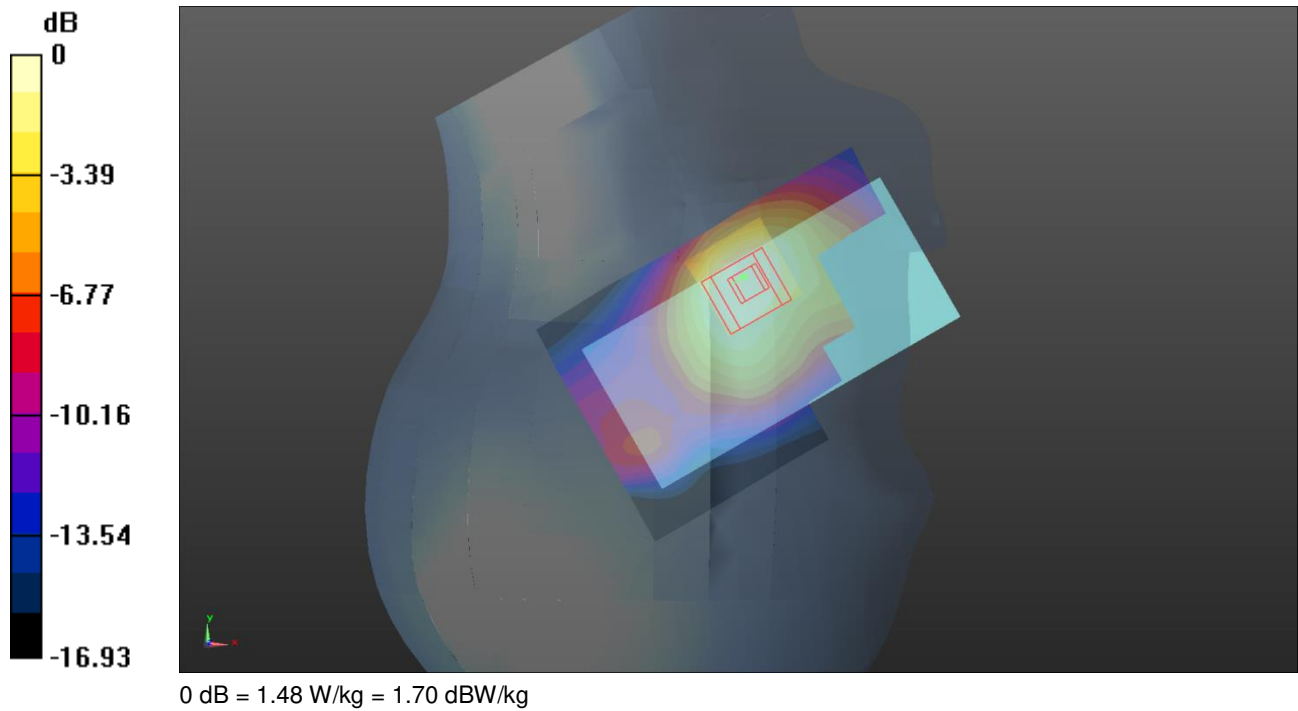
Maximum value of SAR (measured) = 1.42 mW/g



Touch Right of EUT LTE 4 1RB High CH20050 - UL VS Ltd

Date: 18/2/2015

DUT: A1428; Type: Mobile Phone; Serial: Sample 6



Communication System: UID 0, LTE - Band 4 / 20MHz Channel; Frequency: 1720 MHz; Duty Cycle: 1:1  
 Medium: 1800 MHz HSL Medium parameters used (interpolated):  $f = 1720$  MHz;  $\sigma = 1.33$  S/m;  $\epsilon_r = 39.601$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Right Section  
 DASY4 Configuration:  
 - Probe: ES3DV3 - SN3335; ConvF(5.21, 5.21, 5.21); Calibrated: 29/8/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE3 Sn431; Calibrated: 4/11/2014  
 - Phantom: SAM B (Site 58); Type: Twin Phantom; Serial: TP:1020  
 - ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Touch Right- Low/Area Scan (61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Maximum value of SAR (interpolated) = 1.54 W/kg  
**Configuration/Touch Right- Low/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 13.38 V/m; Power Drift = 0.10 dB  
 Peak SAR (extrapolated) = 2.01 W/kg  
**SAR(1 g) = 1.39 W/kg; SAR(10 g) = 0.896 W/kg**  
 Maximum value of SAR (measured) = 1.48 W/kg



Touch Right of EUT LTE 4 1RB High CH20050 - Extract from Original Report

Test Laboratory: UL CCS SAR Lab A

Date: 9/1/2012

**LTE Band 4 (Primary Antenna)**

Frequency: 1720 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.317$  mho/m;  $\epsilon_r = 39.373$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1258; Calibrated: 3/8/2012
- Probe: EX3DV4 - SN3772; ConvF(7.79, 7.79, 7.79); Calibrated: 2/16/2012
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Phantom: SAM v5.0 (A); Type: QD000P40CC; Serial: 1602

**RHS/Touch\_QPSK\_RB# 1, 99\_Ch 20050/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 1.389 mW/g

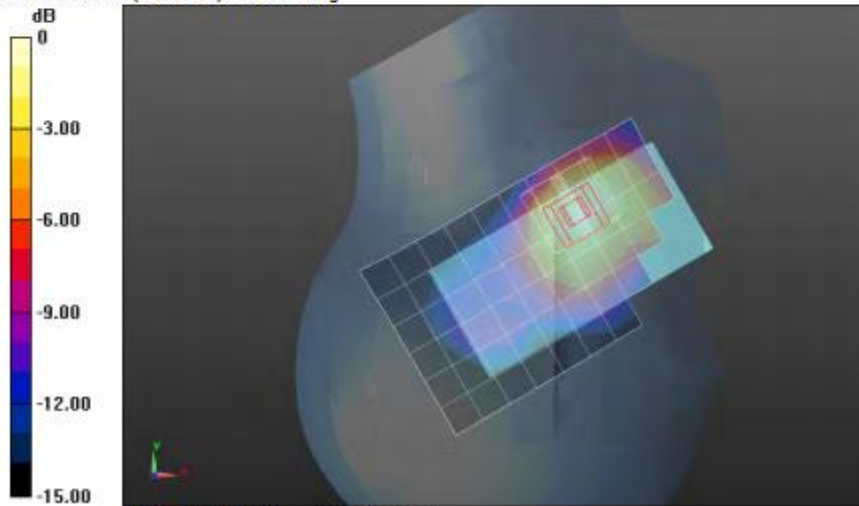
**RHS/Touch\_QPSK\_RB# 1, 99\_Ch 20050/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 32.834 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.8500

**SAR(1 g) = 1.24 mW/g; SAR(10 g) = 0.777 mW/g**

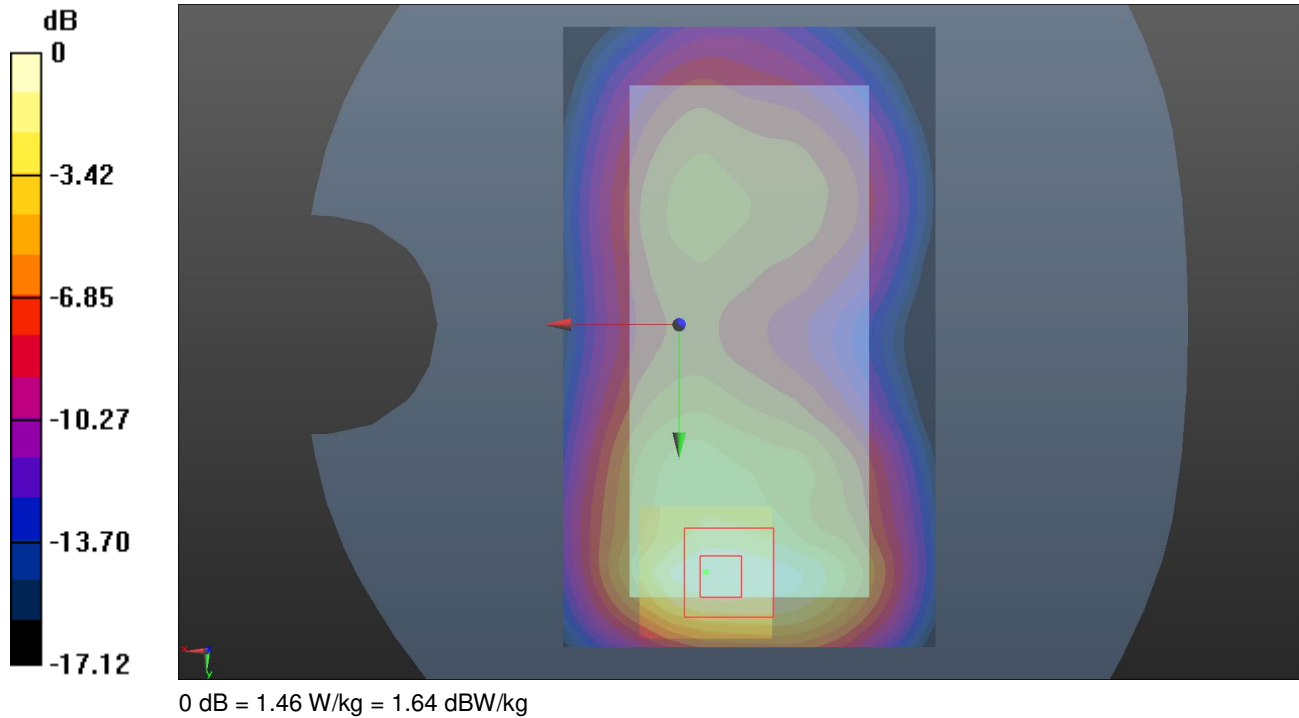
Maximum value of SAR (measured) = 1.463 mW/g



0 dB = 1.460mW/g = 3.29 dB mW/g

Back of EUT LTE 4 1RB Mid CH20175 - UL VS Ltd

Date: 18/2/2015  
**DUT: A1428**



Communication System: UID 0, LTE FDD Bands - 20MHz Channel BW ; Frequency: 1732.5 MHz;Duty Cycle: 1:1  
 Medium: 1800 MHz HSL Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.516$  S/m;  $\epsilon_r = 51.831$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3335; ConvF(4.91, 4.91, 4.91); Calibrated: 29/8/2014;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn431; Calibrated: 4/11/2014
- Phantom: SAM A (Site 58); Type: QD000P40Ca; Serial: TP:1193
- ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Back of the EUT Facing the Phantom - Middle/Area Scan (61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.47 W/kg

**Configuration/Back of the EUT Facing the Phantom - Middle/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.40 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 2.28 W/kg

**SAR(1 g) = 1.3 W/kg; SAR(10 g) = 0.738 W/kg**

Maximum value of SAR (measured) = 1.46 W/kg

Back of EUT LTE 4 1RB Mid CH20175 - Extract from Original Report

Test Laboratory: UL CCS SAR Lab C

Date: 7/19/2012

**LTE Band 4 (Primary Antenna)**

Frequency: 1732.5 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
Medium parameters used (interpolated):  $f = 1732.5$  MHz;  $\sigma = 1.439$  mho/m;  $\epsilon_r = 52.445$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012
- Probe: EX3DV4 - SN3751; ConvF(7.15, 7.15, 7.15); Calibrated: 12/19/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1121

**Rear/QPSK\_RB# 1, 49\_Ch 20175/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.115 mW/g

**Rear/QPSK\_RB# 1, 49\_Ch 20175/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

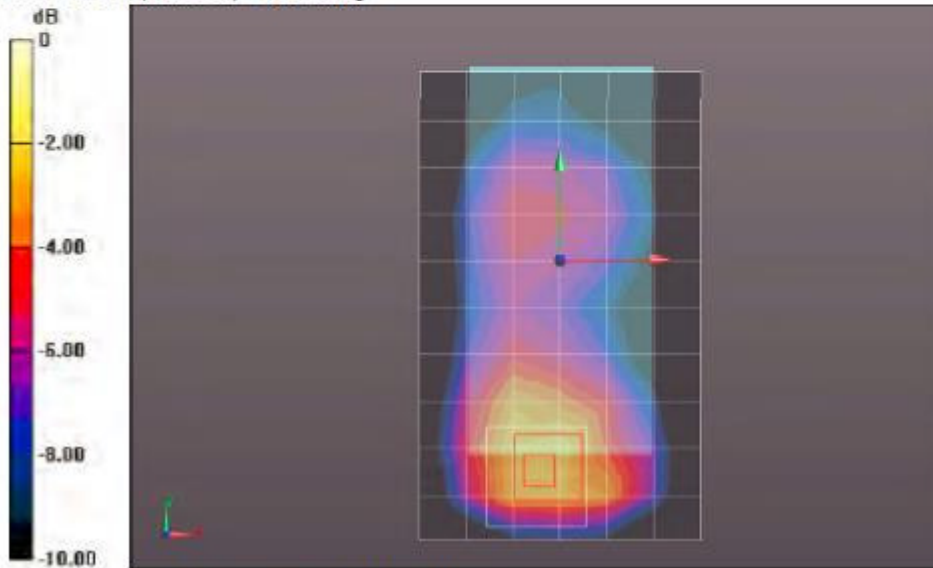
Reference Value = 28.221 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.0350

**SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.674 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

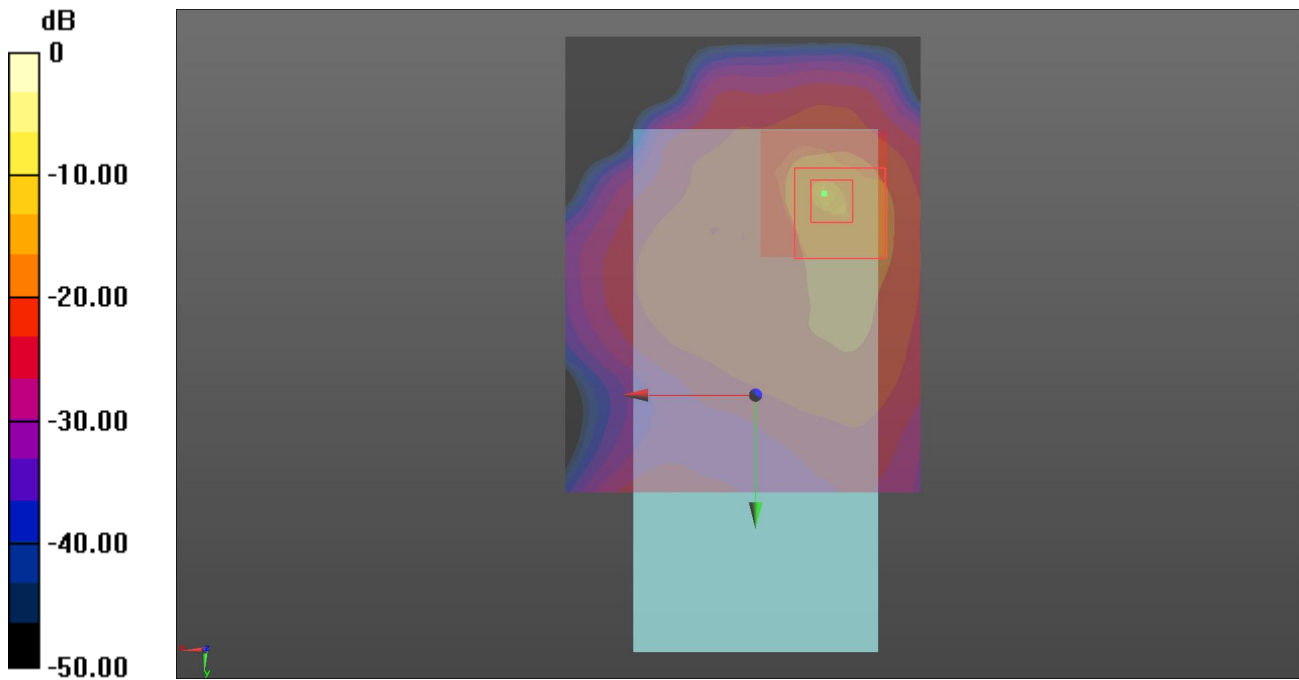
Maximum value of SAR (measured) = 1.520 mW/g





Back of EUT Wi-Fi 2.4 GHz CH6 - UL VS Ltd

Date: 29/10/2014  
**DUT: A1428**



0 dB = 0.169 W/kg = -7.72 dBW/kg

Communication System: UID 0, WLAN 802.11 (0); Frequency: 2437 MHz; Duty Cycle: 1:1  
 Medium: 2450 MHz MSL Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.964$  S/m;  $\epsilon_r = 53.019$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 DASY4 Configuration:  
 - Probe: ES3DV3 - SN3335; ConvF(4.28, 4.28, 4.28); Calibrated: 29/8/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE4 Sn1435; Calibrated: 15/4/2014  
 - Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:xxxx  
 - ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Back (Sample A10202 Black) 2 2/Area Scan (71x91x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.175 W/kg

**Configuration/Back (Sample A10202 Black) 2 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.077 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.363 W/kg

**SAR(1 g) = 0.147 W/kg; SAR(10 g) = 0.066 W/kg**

Maximum value of SAR (measured) = 0.169 W/kg

Back of EUT Wi-Fi 2.4 GHz CH6 - Extract from Original Report

Test Laboratory: UL CCS SAR Lab A

Date: 7/6/2012

**WiFi 2.4GHz**

Frequency: 2437 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 1.91$  mho/m;  $\epsilon_r = 51.374$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1258; Calibrated: 3/8/2012
- Probe: EX3DV4 - SN3772; ConvF(6.65, 6.65, 6.65); Calibrated: 2/16/2012;
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Phantom: ELI v5.0 (B); Type: QDOVA001BB; Serial: 1099

**Rear/802.11b\_ch 6 w/Headset/Area Scan (8x13x1):** Measurement grid: dx=12mm, dy=12mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.262 mW/g

**Rear/802.11b\_ch 6 w/Headset/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

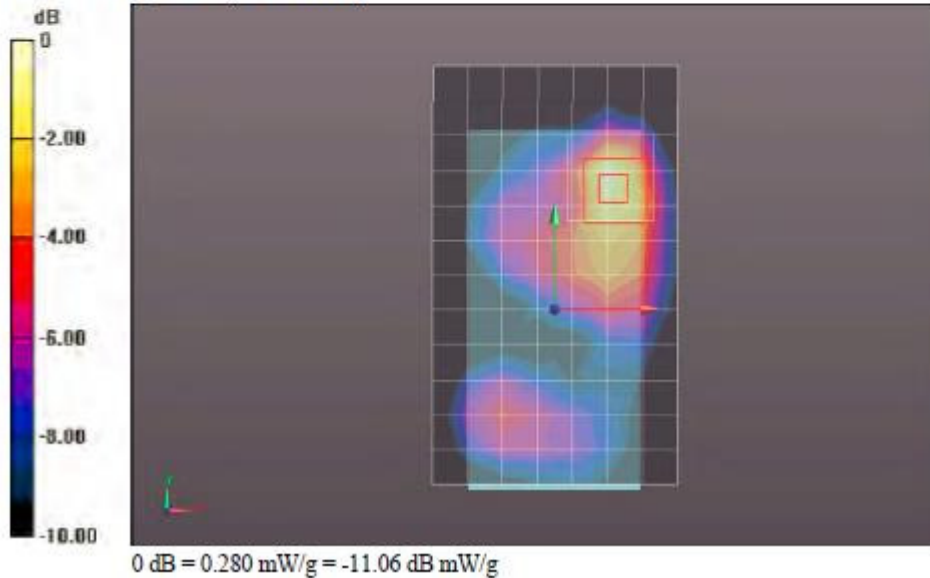
Reference Value = 11.824 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.451 mW/g

**SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.094 mW/g**

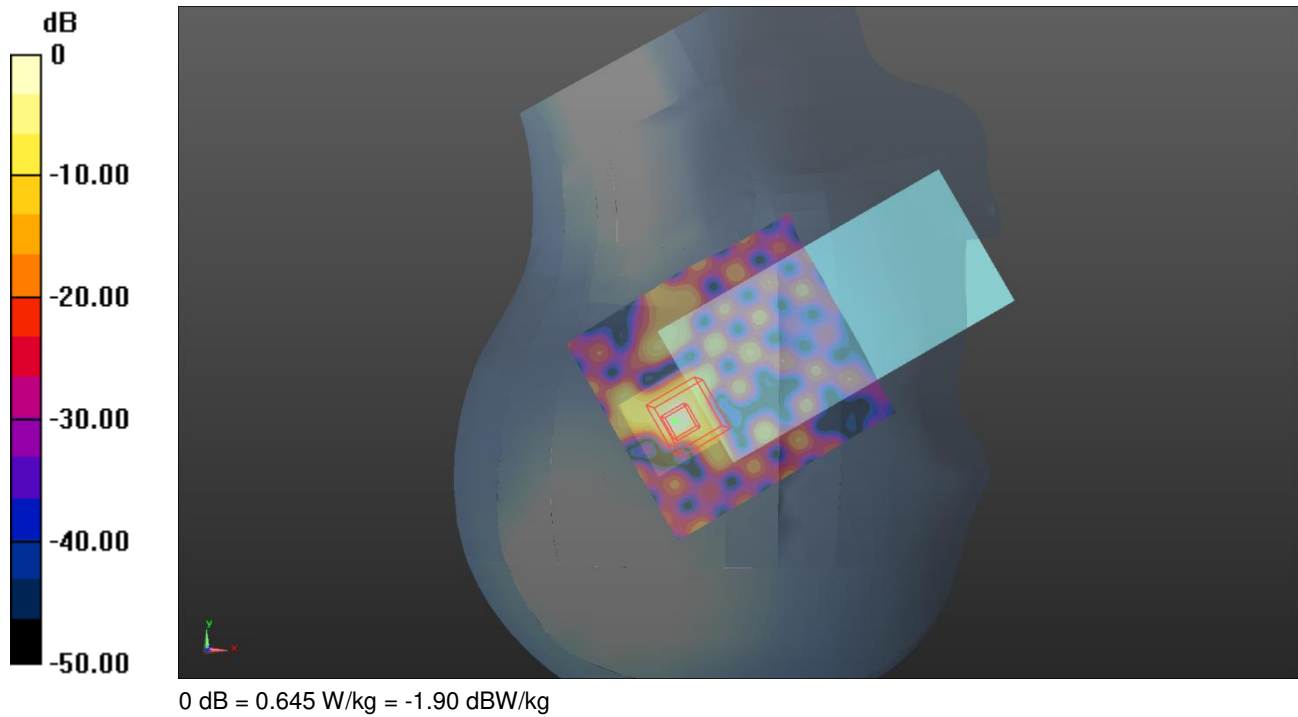
Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.280 mW/g



Touch Right of EUT Wi-Fi 5.3 GHz CH52 - UL VS Ltd

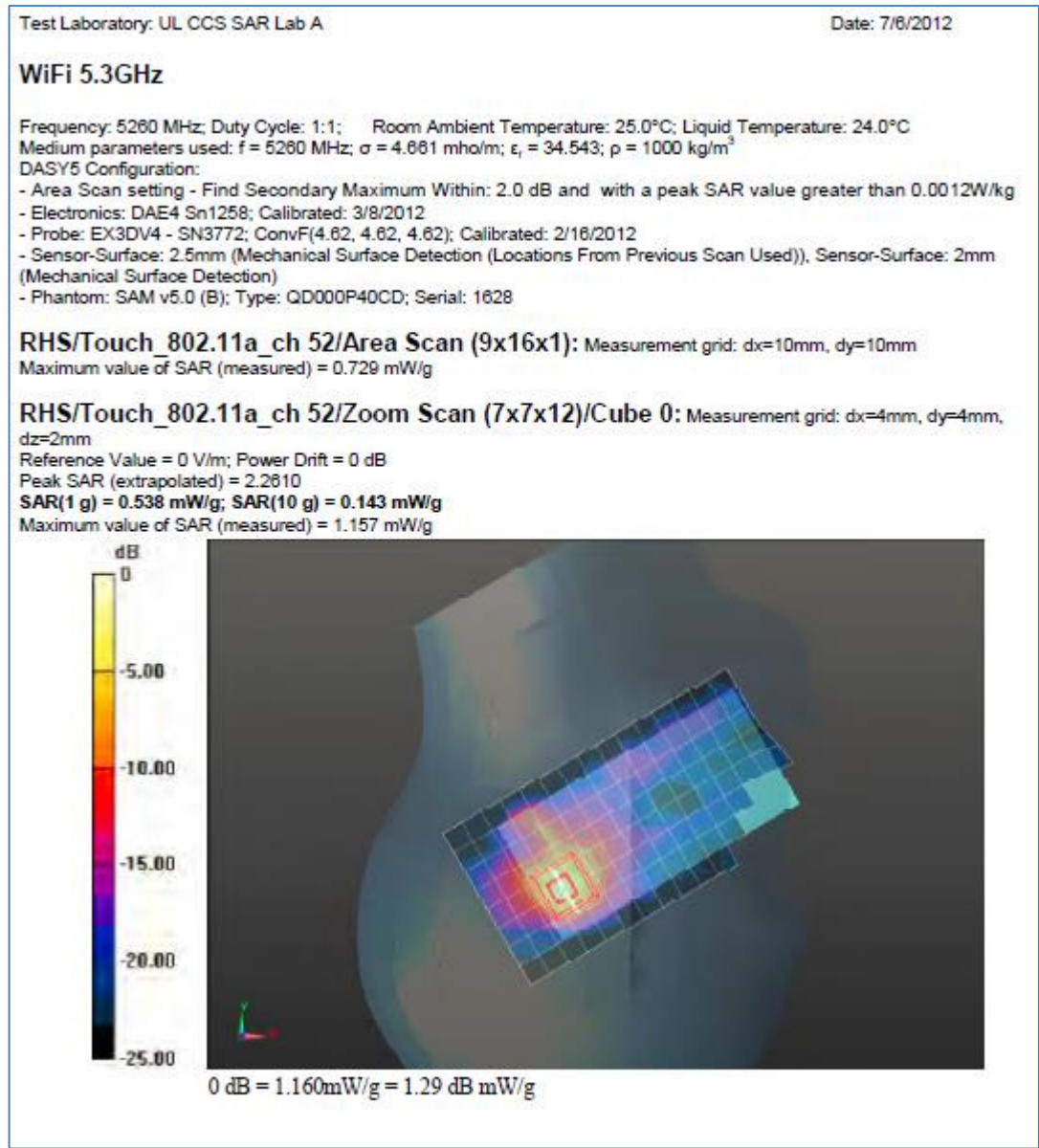
Date: 17/10/2014  
**DUT: A1428**



Communication System: UID 0, WLAN 802.11 (0); Frequency: 5260 MHz; Duty Cycle: 1:1  
 Medium: 5200/5500/5800 MHz HSL Medium parameters used (interpolated): f = 5260 MHz;  $\sigma = 4.756$  S/m;  $\epsilon_r = 35.944$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Right Section  
 DASY4 Configuration:  
 - Probe: EX3DV4 - SN3994; ConvF(5.08, 5.08, 5.08); Calibrated: 7/5/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE3 Sn431; Calibrated: 18/11/2013  
 - Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD; Serial: TP:xxxx  
 - ; SEMCAD X Version 14.6.10 (7331)

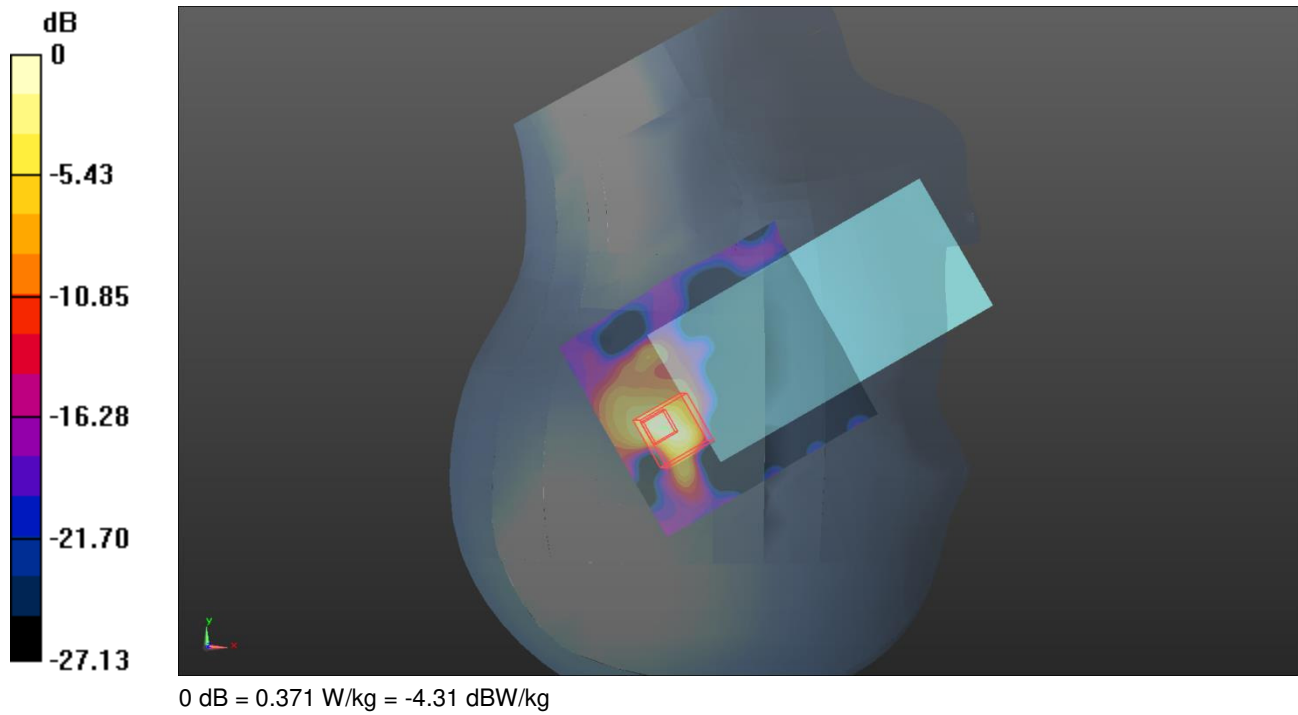
**Configuration/Touch Right (Sample A10202 Black)/Area Scan (91x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
 Maximum value of SAR (interpolated) = 1.08 W/kg  
**Configuration/Touch Right (Sample A10202 Black)/Zoom Scan (7x7x12) 2 (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 12.33 V/m; Power Drift = 0.11 dB  
 Peak SAR (extrapolated) = 1.51 W/kg  
**SAR(1 g) = 0.457 W/kg; SAR(10 g) = 0.187 W/kg**  
 Maximum value of SAR (measured) = 0.645 W/kg

Touch Right of EUT Wi-Fi 5.3 GHz CH52 - Extract from Original Report



Touch Right of EUT Wi-Fi 5.5 GHz CH136 - UL VS Ltd

Date: 29/10/2014  
**DUT: A1428**



Communication System: UID 0, WLAN 802.11 (0); Frequency: 5680 MHz; Duty Cycle: 1:1  
 Medium: 5200/5500/5800 MHz HSL Medium parameters used (interpolated): f = 5680 MHz;  $\sigma = 5.119$  S/m;  $\epsilon_r = 34.636$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Right Section  
 DASY4 Configuration:  
 - Probe: EX3DV4 - SN3994; ConvF(4.85, 4.85, 4.85); Calibrated: 7/5/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE3 Sn450; Calibrated: 16/9/2014  
 - Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD; Serial: TP:xxxx  
 - ; SEMCAD X Version 14.6.10 (7331)

**Configuration/DNU Touch Right (Sample A10468 White) 2/Area Scan (91x101x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
 Maximum value of SAR (interpolated) = 0.401 W/kg  
**Configuration/DNU Touch Right (Sample A10468 White) 2/Zoom Scan (7x7x12) 2 (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
 Reference Value = 8.114 V/m; Power Drift = 0.07 dB  
 Peak SAR (extrapolated) = 6.22 W/kg  
**SAR(1 g) = 0.450 W/kg; SAR(10 g) = 0.118 W/kg**  
 Maximum value of SAR (measured) = 0.371 W/kg



Touch Right of EUT Wi-Fi 5.5 GHz CH136 - Extract from Original Report

Test Laboratory: UL CCS SAR Lab A

Date: 7/3/2012

**WiFi 5.5GHz**

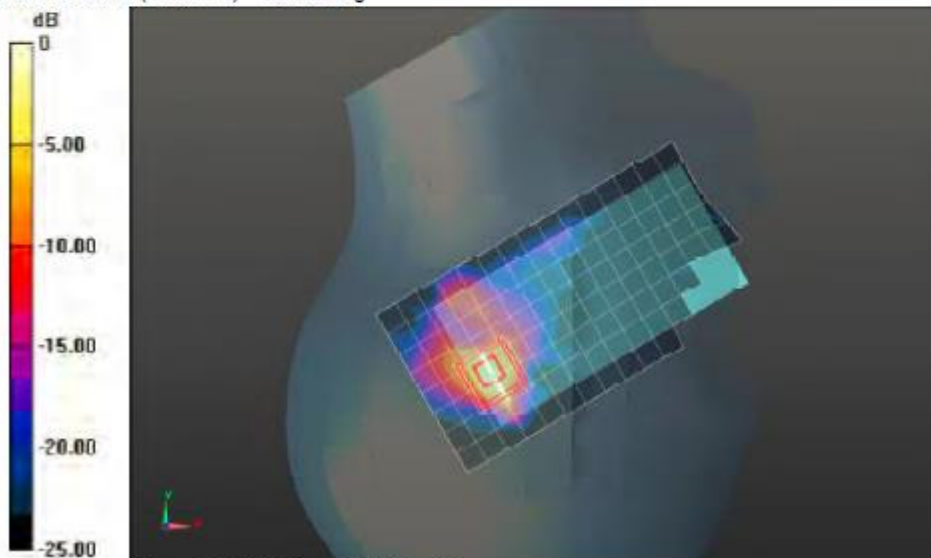
Frequency: 5680 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 25.0°C; Liquid Temperature: 24.0°C  
Medium parameters used:  $f = 5680$  MHz;  $\sigma = 5.27$  mho/m;  $\epsilon_r = 35.565$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1258; Calibrated: 3/8/2012
- Probe: EX3DV4 - SN3772; ConvF(4.25, 4.25, 4.25); Calibrated: 2/16/2012
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: SAM v5.0 (B); Type: QD000P40CD; Serial: 1628

**RHS/Touch\_802.11a\_ch 136/Area Scan (9x16x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 1.029 mW/g

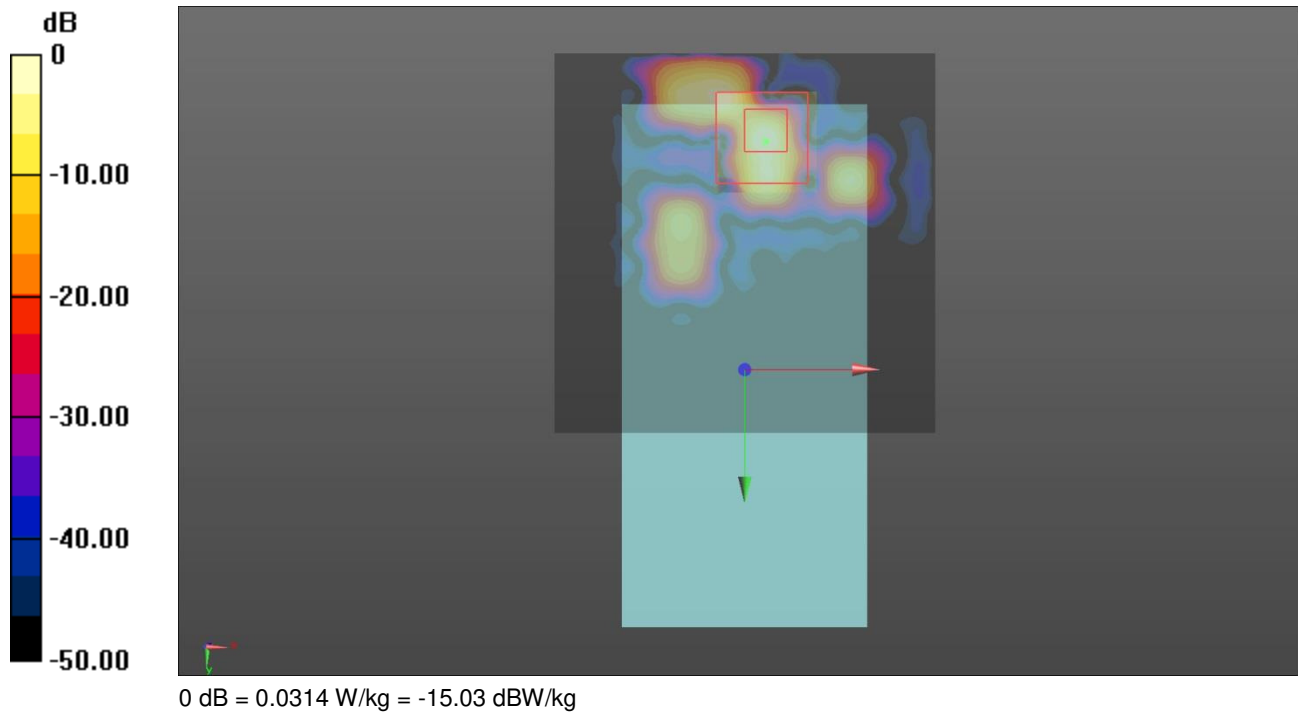
**RHS/Touch\_802.11a\_ch 136/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
Reference Value = 14.370 V/m; Power Drift = -0.17 dB  
Peak SAR (extrapolated) = 2.6580  
**SAR(1 g) = 0.593 mW/g; SAR(10 g) = 0.151 mW/g**  
Maximum value of SAR (measured) = 1.308 mW/g



0 dB = 1.310mW/g = 2.35 dB mW/g

Front of EUT Wi-Fi 5.5 GHz CH124 - UL VS Ltd

Date: 16/2/2015  
**DUT: A1428**



Communication System: UID 0, WLAN 802.11 (0); Frequency: 5620 MHz;Duty Cycle: 1:1  
 Medium: 5200/5500/5800 MHz MSL Medium parameters used (interpolated): f = 5620 MHz;  $\sigma = 5.841$  S/m;  $\epsilon_r = 47.606$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 DASY4 Configuration:  
 - Probe: EX3DV4 - SN3995; ConvF(4.1, 4.1, 4.1); Calibrated: 9/5/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE3 Sn417; Calibrated: 10/4/2014  
 - Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA; Serial: TP:xxxx  
 - ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Front (Sample A10202 Black)/Area Scan (91x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
 Maximum value of SAR (interpolated) = 0.0389 W/kg

**Configuration/Front (Sample A10202 Black)/Zoom Scan (7x7x12) 2 (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

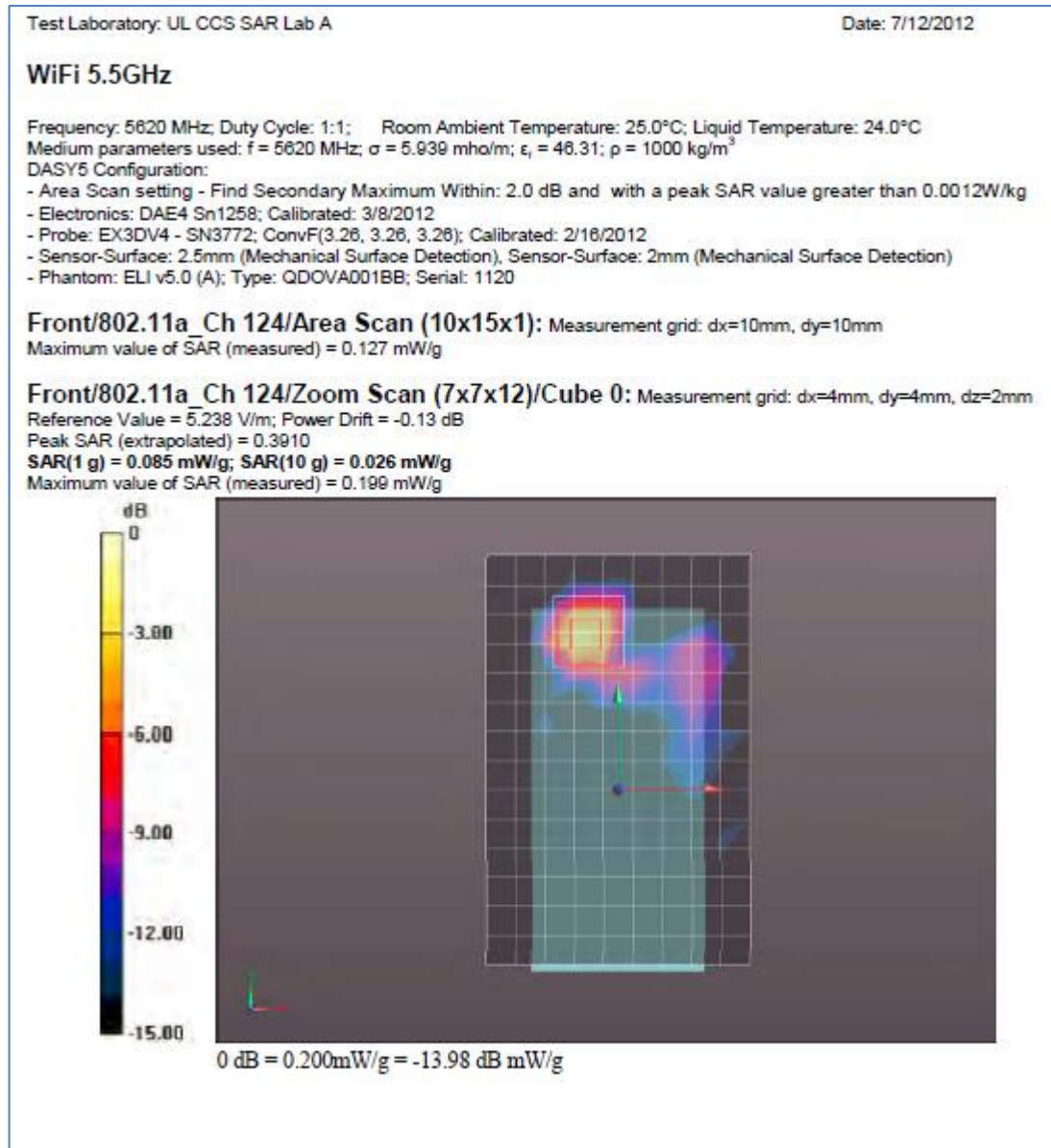
Reference Value = 3.933 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.200 W/kg

**SAR(1 g) = 0.041 W/kg; SAR(10 g) = 0.011 W/kg**

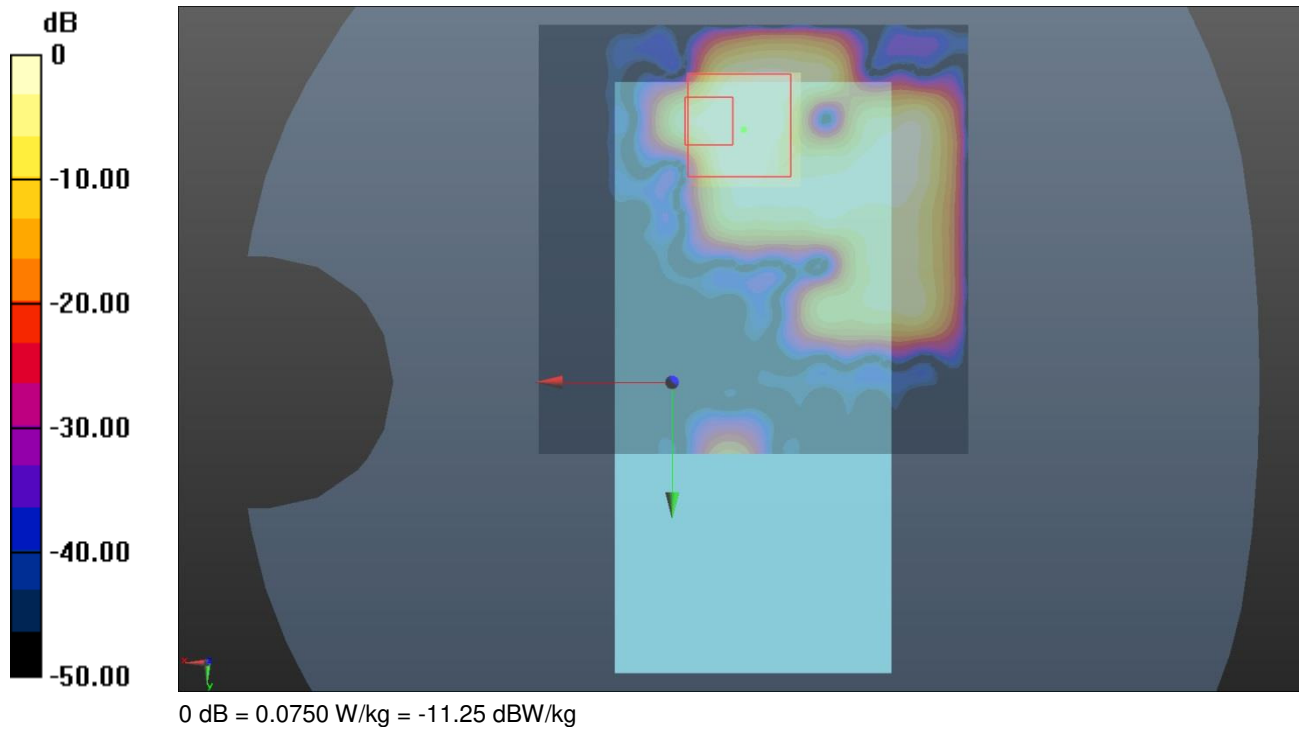
Maximum value of SAR (measured) = 0.0314 W/kg

Front of EUT Wi-Fi 5.5 GHz CH124 - Extract from Original Report



Front of EUT Wi-Fi 5.8 GHz CH149 - UL VS Ltd

Date: 17/3/2015  
**DUT: A1428**

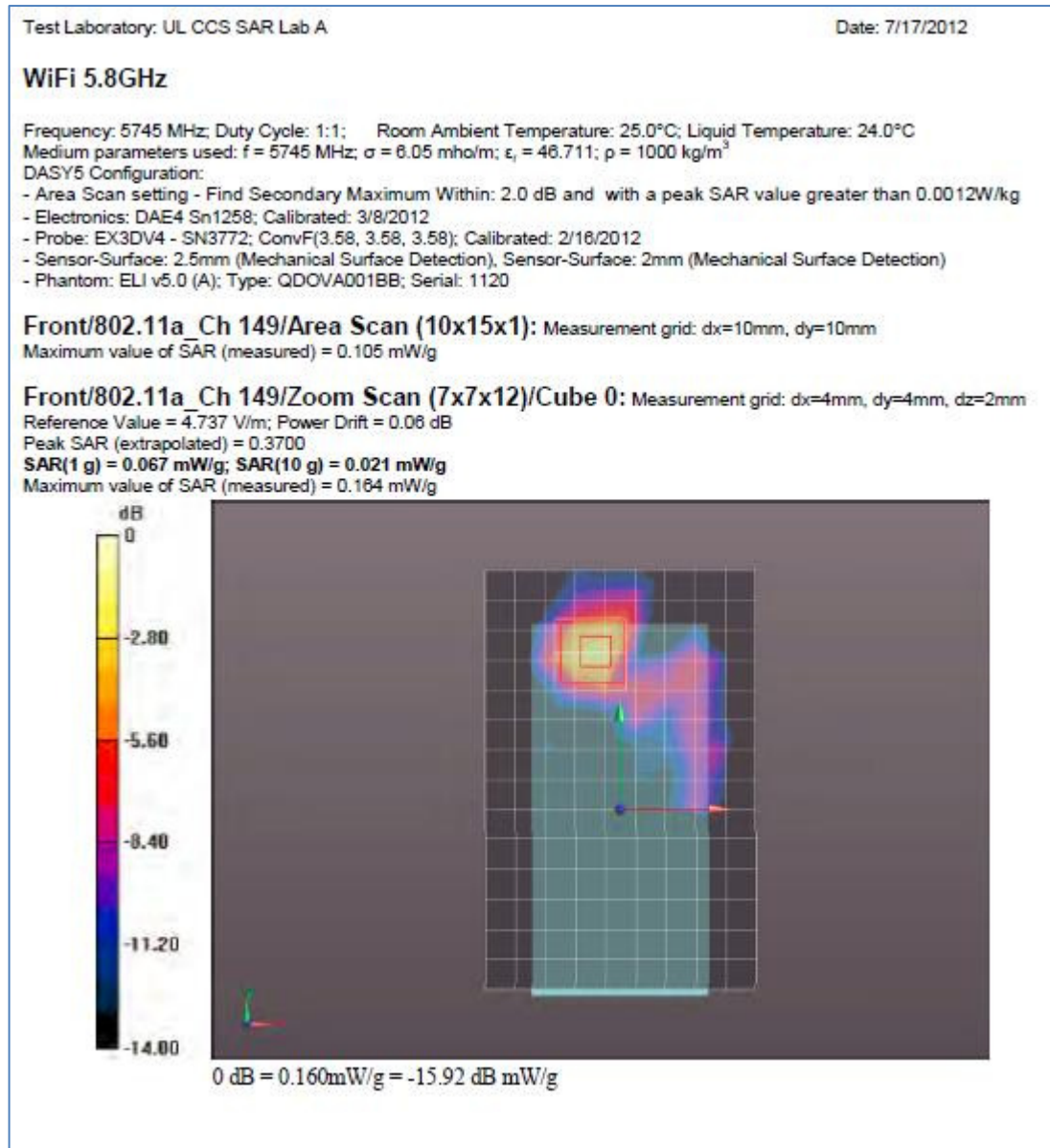


Communication System: UID 0, WLAN 802.11 (0); Frequency: 5745 MHz; Duty Cycle: 1:1  
 Medium: 5GHz MSL Medium parameters used (interpolated):  $f = 5745$  MHz;  $\sigma = 6.107$  S/m;  $\epsilon_r = 47.607$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 DASY4 Configuration:  
 - Probe: EX3DV4 - SN3814; ConvF(4.06, 4.06, 4.06); Calibrated: 18/9/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE4 Sn1435; Calibrated: 15/4/2014  
 - Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD; Serial: TP:xxxx  
 - ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Sample 9 Front/Area Scan (91x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
 Maximum value of SAR (interpolated) = 0.111 W/kg

**Configuration/Sample 9 Front/Zoom Scan (7x7x12) 2 (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
 Reference Value = 5.403 V/m; Power Drift = 0.17 dB  
 Peak SAR (extrapolated) = 0.895 W/kg  
**SAR(1 g) = 0.096 W/kg; SAR(10 g) = 0.031 W/kg**  
 Maximum value of SAR (measured) = 0.0750 W/kg

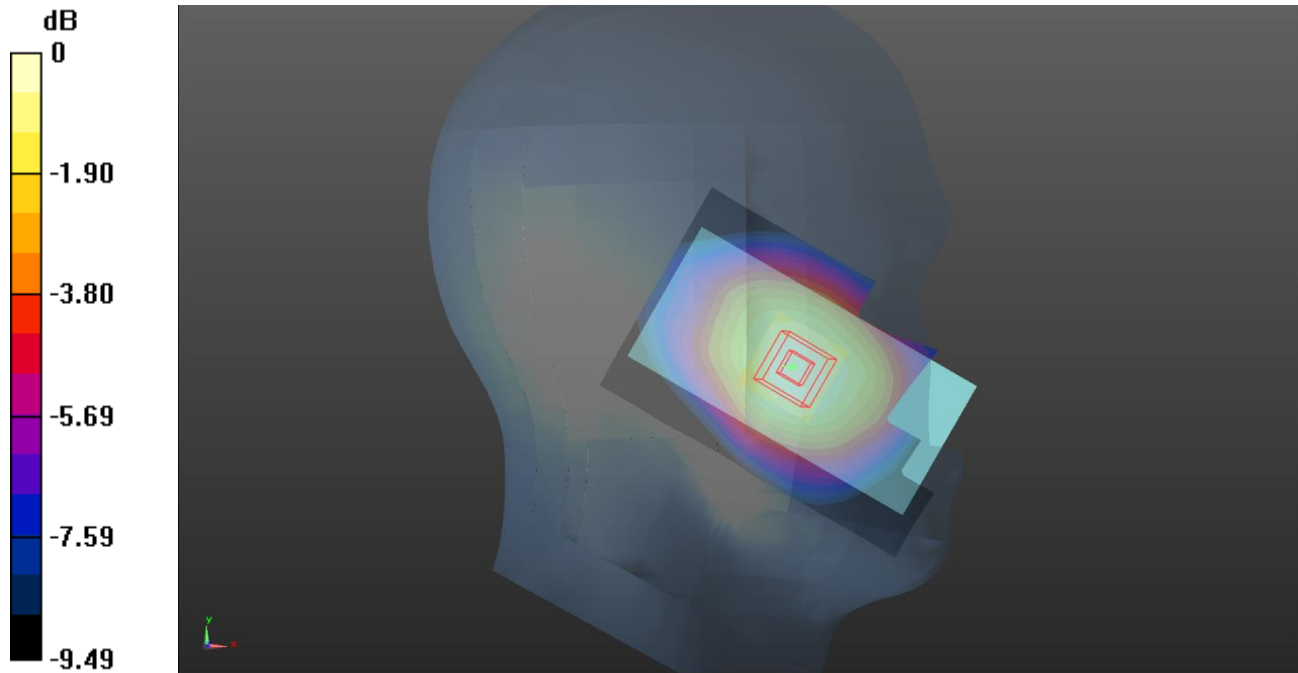
Front of EUT Wi-Fi 5.8 GHz CH149 - Extract from Original Report





**12.8.2. Baseline Plots – A1429****Touch Left of EUT GSM 850 CH190 - UL VS Ltd**

Date: 30/1/2015

**DUT: A1429**

0 dB = 0.515 W/kg = -2.88 dBW/kg

Communication System: UID 0, GSM 850 MHz; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: 900 MHz HSL Medium parameters used (interpolated):  $f = 836.6$  MHz;  $\sigma = 0.896$  S/m;  $\epsilon_r = 41.541$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1529; ConvF(6.28, 6.28, 6.28); Calibrated: 22/5/2014;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn394; Calibrated: 16/5/2014
- Phantom: SAM 12b (Site 56); Type: SAM 4.0; Serial: TP:1192
- ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Touch Left of the EUT Facing the Phantom - Middle 2 2/Area Scan (61x111x1):** Interpolated grid:

dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.520 W/kg

**Configuration/Touch Left of the EUT Facing the Phantom - Middle 2 2/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:**

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.536 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.596 W/kg

**SAR(1 g) = 0.484 W/kg; SAR(10 g) = 0.366 W/kg**

Maximum value of SAR (measured) = 0.515 W/kg

Touch Left of EUT GSM 850 CH190 - Extract from Original Report

Test Laboratory: UL CCS SAR Lab B Date: 7/30/2012

**GSM850 (Primary Antenna)**

Frequency: 836.6 MHz; Duty Cycle: 1:8.00018; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
Medium parameters used (interpolated):  $f = 836.6 \text{ MHz}$ ;  $\sigma = 0.903 \text{ mho/m}$ ;  $\epsilon_r = 43.059$ ;  $\rho = 1000 \text{ kg/m}^3$

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1259; Calibrated: 2/13/2012
- Probe: EX3DV4 - SN3886; ConvF(8.61, 8.61, 8.61); Calibrated: 2/16/2012
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Phantom: SAM; Type: QD000P40CD; Serial: 1629

**LHS/Touch\_Voice\_ch 190/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.798 mW/g

**LHS/Touch\_Voice\_ch 190/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

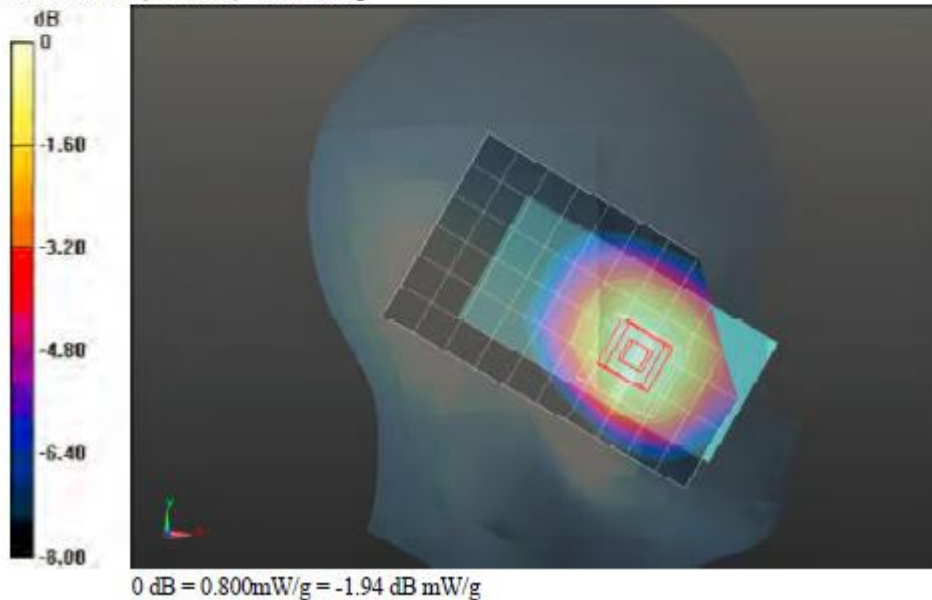
Reference Value = 29.968 V/m; Power Drift = 0.0042 dB

Peak SAR (extrapolated) = 0.8830

**SAR(1 g) = 0.737 mW/g; SAR(10 g) = 0.566 mW/g**

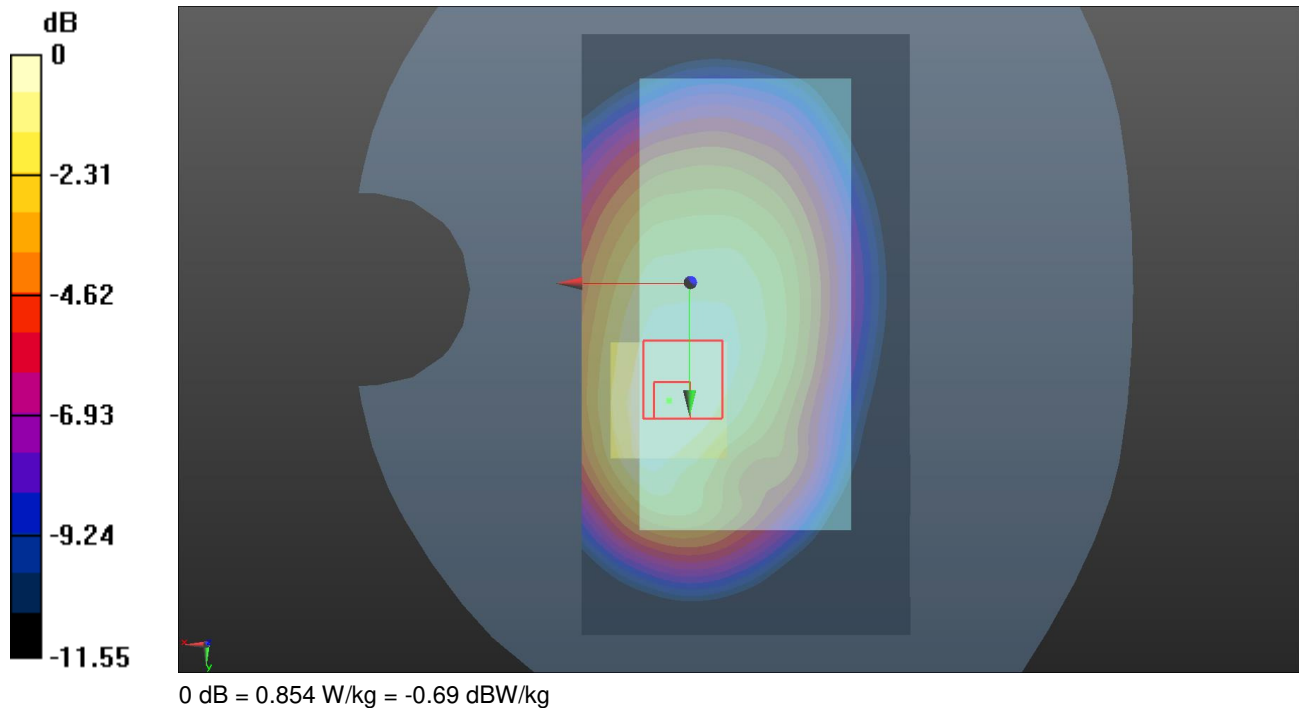
Info: [Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.799 mW/g



Back of EUT GSM 850 GPRS 2Tx CH251 - UL VS Ltd

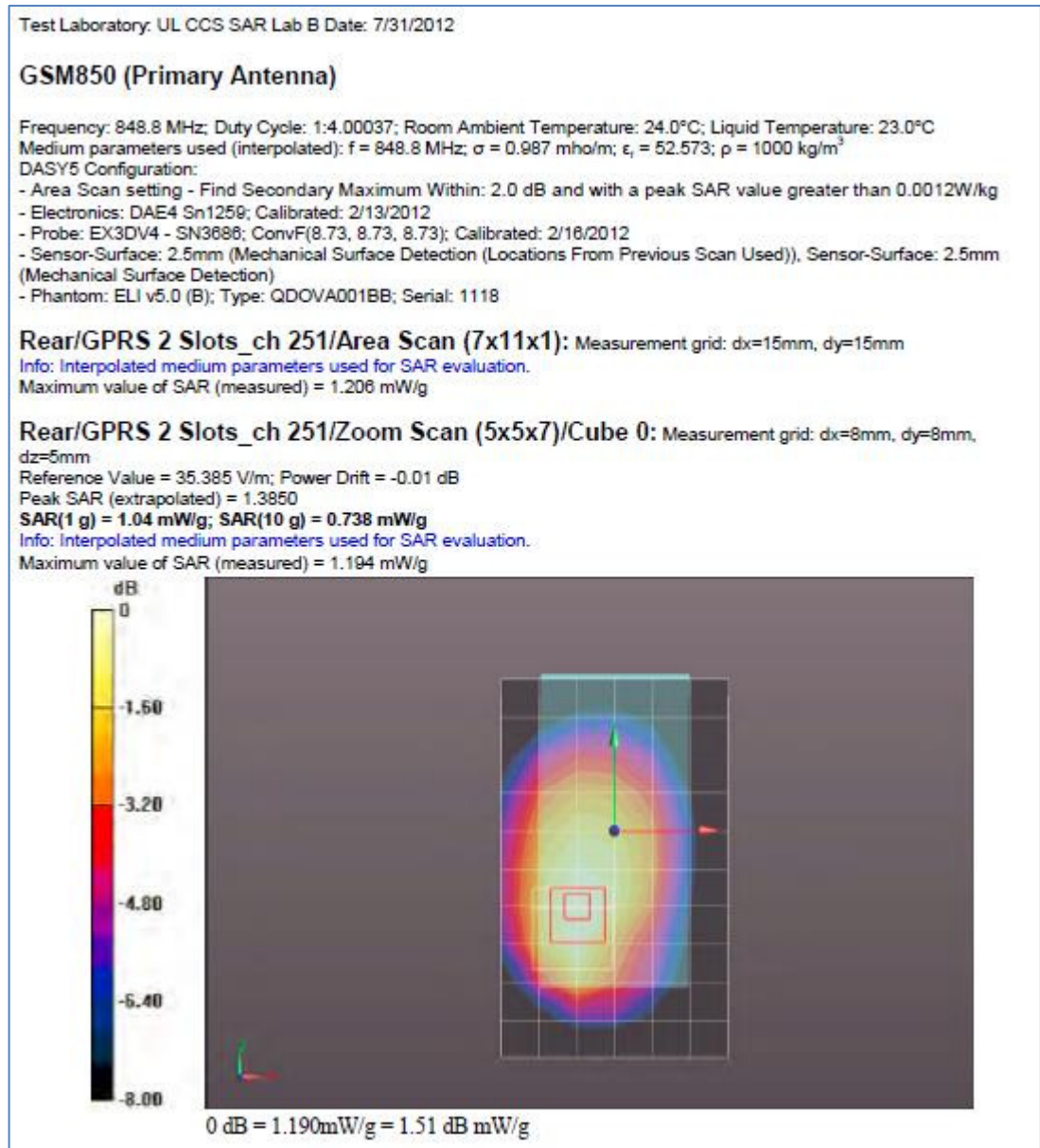
Date: 29/1/2015  
**DUT: A1429**



Communication System: UID 0, GPRS 850 MHz 2TX; Frequency: 848.8 MHz; Duty Cycle: 1:4  
 Medium: 750/900 MHz MSL Medium parameters used (interpolated):  $f = 848.8$  MHz;  $\sigma = 1.008$  S/m;  $\epsilon_r = 53.677$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 DASY4 Configuration:  
 - Probe: ET3DV6 - SN1529; ConvF(6, 6, 6); Calibrated: 22/5/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE3 Sn394; Calibrated: 16/5/2014  
 - Phantom: SAM 12a (Site 56); Type: SAM 4.0; Serial: TP:1020  
 - ; SEMCAD X Version 14.6.10 (7331)

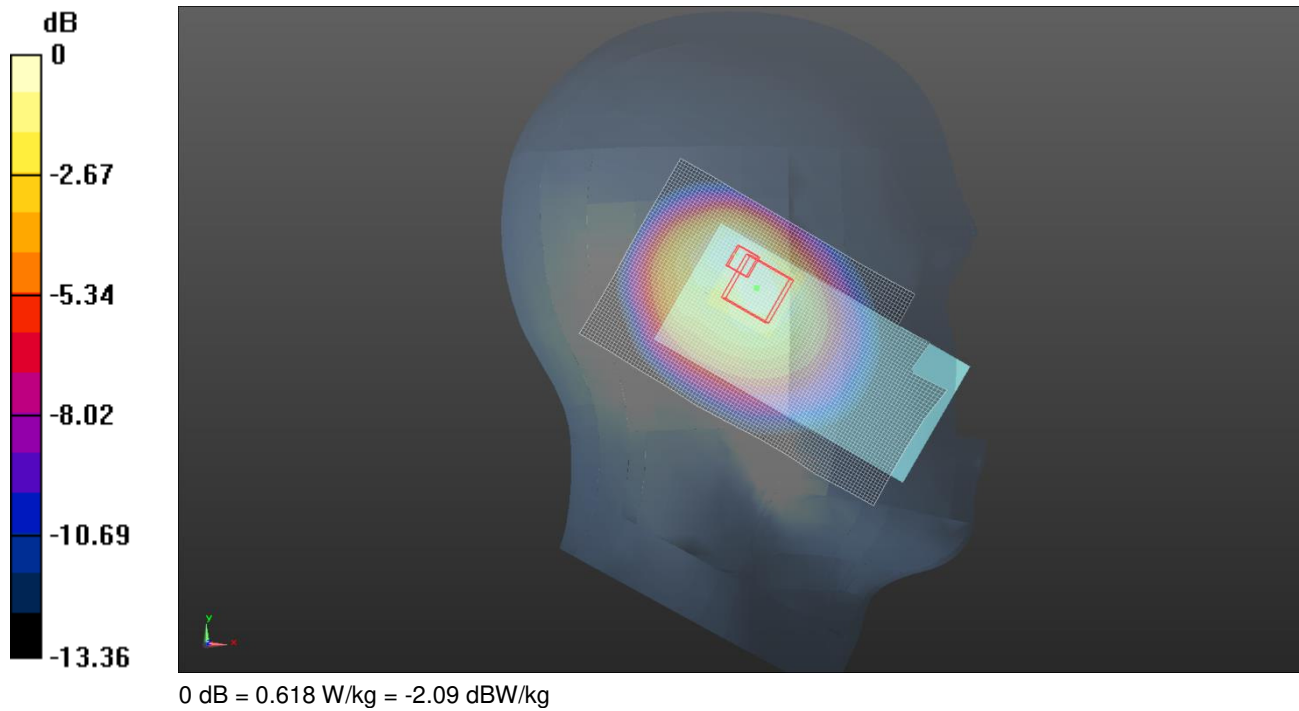
**Configuration/Back of the EUT Facing the Phantom - High 2/Area Scan (61x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm  
 Maximum value of SAR (interpolated) = 0.859 W/kg  
**Configuration/Back of the EUT Facing the Phantom - High 2/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm  
 Reference Value = 26.32 V/m; Power Drift = -0.04 dB  
 Peak SAR (extrapolated) = 1.05 W/kg  
**SAR(1 g) = 0.802 W/kg; SAR(10 g) = 0.591 W/kg**  
 Maximum value of SAR (measured) = 0.854 W/kg

Back of EUT GSM 850 GPRS 2Tx CH251 - Extract from Original Report



Touch Left of EUT CDMA BC10 CH684 - UL VS Ltd

Date: 18/11/2014  
**DUT: A1429**



Communication System: UID 0, CDMA2000 (0); Frequency: 823.1 MHz; Duty Cycle: 1:1  
 Medium: 900 MHz HSL Medium parameters used (interpolated):  $f = 823.1$  MHz;  $\sigma = 0.879$  S/m;  $\epsilon_r = 41.484$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Left Section  
 DASY4 Configuration:  
 - Probe: ES3DV3 - SN3335; ConvF(6.46, 6.46, 6.46); Calibrated: 29/8/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE4 Sn1438; Calibrated: 12/5/2014  
 - Phantom: SAM (30deg probe tilt) with CRP v5.0; Type: QD000P40CD; Serial: TP:1836  
 - ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Touch Left- High/Area Scan (61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.586 W/kg

**Configuration/Touch Left- High/Zoom Scan (5x5x7) (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.23 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.956 W/kg

**SAR(1 g) = 0.555 W/kg; SAR(10 g) = 0.384 W/kg**

Maximum value of SAR (measured) = 0.618 W/kg



Touch Left of EUT CDMA BC10 CH684 - Extract from Original Report

Test Laboratory: UL CCS SAR Lab C

Date: 7/13/2012

**CDMA BC10 (Secondary Antenna)**

Frequency: 823.1 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C

Medium parameters used (interpolated):  $f = 823.1$  MHz;  $\sigma = 0.883$  mho/m;  $\epsilon_r = 41.86$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1239; Calibrated: 6/6/2012
- Probe: EX3DV4 - SN3751; ConvF(8.35, 8.35, 8.35); Calibrated: 12/19/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Phantom: SAM; Type: QD000P40CD; Serial: 1632

**LHS/Touch\_RC3 SO55\_ch 684/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 1.046 mW/g

**LHS/Touch\_RC3 SO55\_ch 684/Zoom Scan (7x8x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

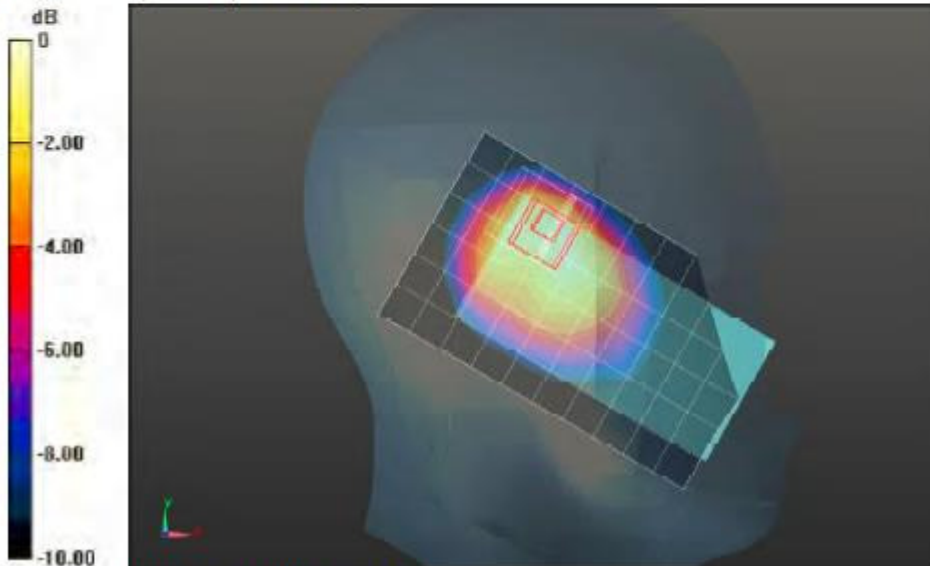
Reference Value = 34.649 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.6440

**SAR(1 g) = 0.925 mW/g; SAR(10 g) = 0.646 mW/g**

Info: Interpolated medium parameters used for SAR evaluation.

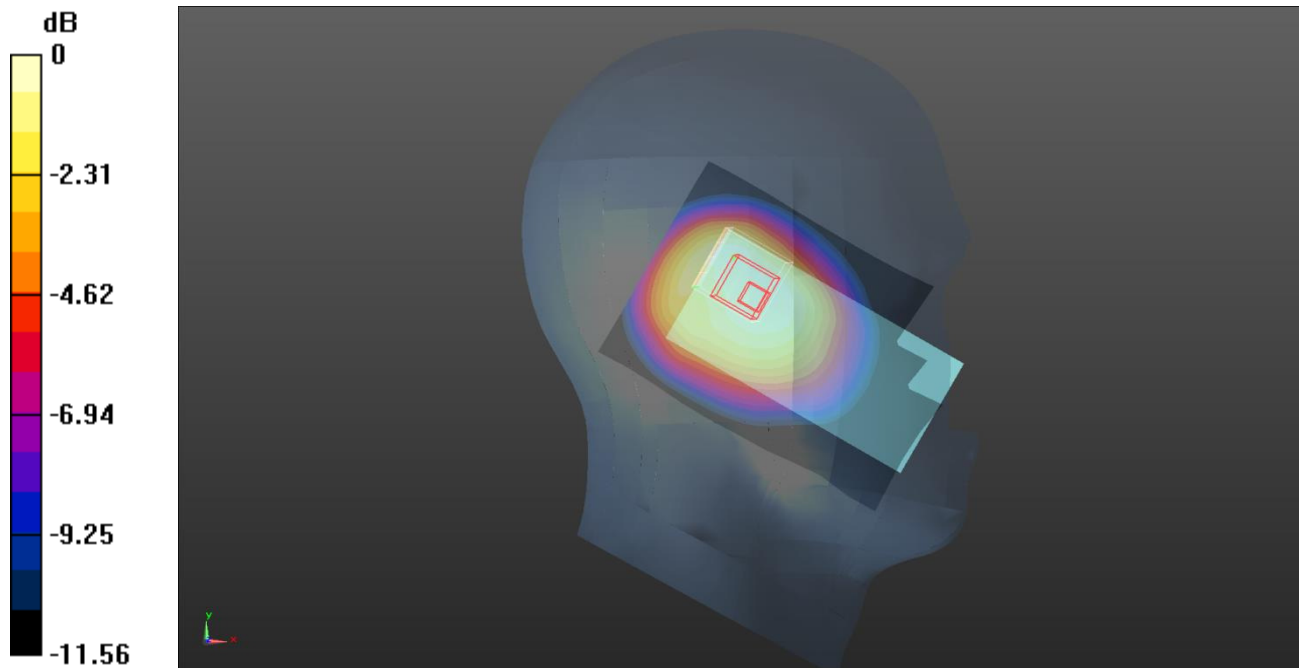
Maximum value of SAR (measured) = 1.166 mW/g



0 dB = 1.170mW/g = 1.36 dB mW/g

Touch Left of EUT LTE 13 CH23230 - UL VS Ltd

Date: 2/2/2015  
 DUT: A1429



0 dB = 0.385 W/kg = -4.15 dBW/kg

Communication System: UID 0, LTE - Band 13 / 10MHz Channel; Frequency: 782 MHz; Duty Cycle: 1:1  
 Medium: 900 MHz HSL Medium parameters used (interpolated):  $f = 782$  MHz;  $\sigma = 0.855$  S/m;  $\epsilon_r = 41.971$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Right Section  
 DASY4 Configuration:  
 - Probe: ET3DV6 - SN1529; ConvF(6.6, 6.6, 6.6); Calibrated: 22/5/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE3 Sn394; Calibrated: 16/5/2014  
 - Phantom: SAM 12b (Site 56); Type: SAM 4.0; Serial: TP:1192  
 - ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Touch Left of the EUT Facing the Phantom - High/Area Scan (61x101x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.394 W/kg

**Configuration/Touch Left of the EUT Facing the Phantom - High/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.30 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.696 W/kg

**SAR(1 g) = 0.354 W/kg; SAR(10 g) = 0.216 W/kg**

Maximum value of SAR (measured) = 0.385 W/kg

Touch Left of EUT LTE 13 CH23230 - Extract from Original Report

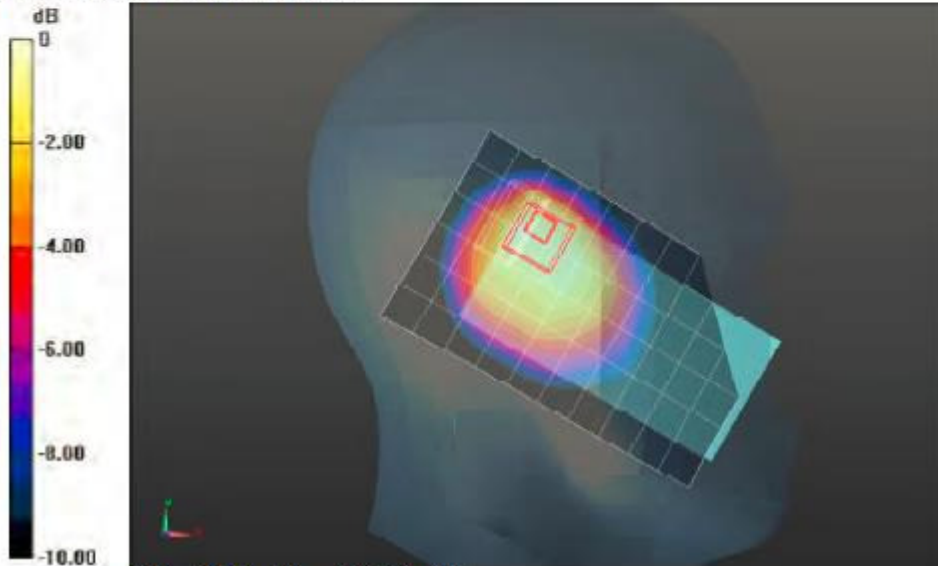
Test Laboratory: UL CCS SAR Lab A Date: 9/5/2012

**LTE Band 13 (Secondary Antenna)**

Frequency: 782 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 24.0°C; Liquid Temperature: 23.0°C  
 Medium parameters used (interpolated):  $f = 782 \text{ MHz}$ ;  $\sigma = 0.893 \text{ mho/m}$ ;  $\epsilon_r = 40.156$ ;  $\rho = 1000 \text{ kg/m}^3$   
 DASY5 Configuration:  
 - Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg  
 - Electronics: DAE4 Sn1258; Calibrated: 3/8/2012  
 - Probe: EX3DV4 - SN3772; ConvF(9.01, 9.01, 9.01); Calibrated: 2/16/2012  
 - Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)  
 - Phantom: SAM v5.0 (B); Type: QD00P40CD; Serial: 1628

**LHS/Touch\_QPSK\_RB# 1, 24\_Ch 23230/Area Scan (7x11x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Info: Interpolated medium parameters used for SAR evaluation.  
 Maximum value of SAR (measured) = 0.720 mW/g

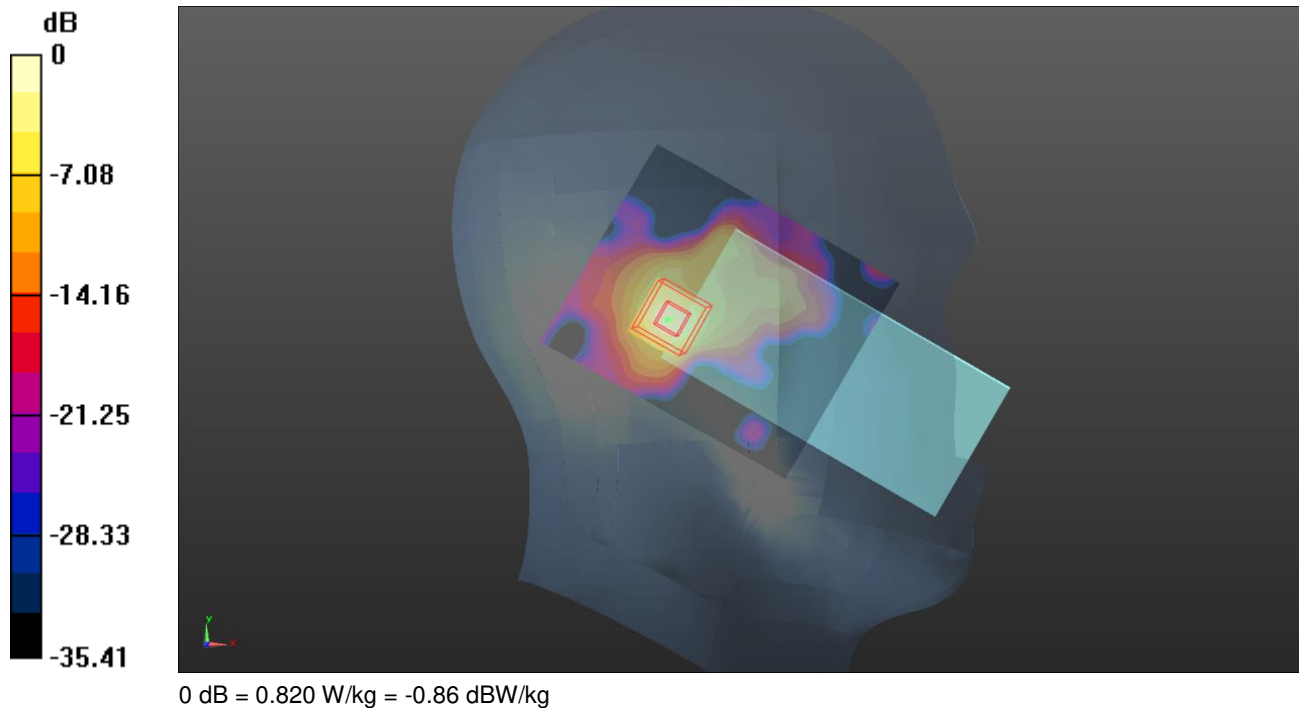
**LHS/Touch\_QPSK\_RB# 1, 24\_Ch 23230/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  
 $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$   
 Reference Value = 28.812 V/m; Power Drift = -0.01 dB  
 Peak SAR (extrapolated) = 1.1640  
**SAR(1 g) = 0.616 mW/g; SAR(10 g) = 0.384 mW/g**  
 Info: Interpolated medium parameters used for SAR evaluation.  
 Maximum value of SAR (measured) = 0.802 mW/g



0 dB = 0.800mW/g = -1.94 dB mW/g

Touch Left of EUT Wi-Fi 5.2 GHz CH48 - UL VS Ltd

Date: 27/11/2014  
**DUT: A1429**



Communication System: UID 0, WLAN 802.11 (0); Frequency: 5240 MHz; Duty Cycle: 1:1  
 Medium: 5200/5500/5800 MHz MSL Medium parameters used (interpolated):  $f = 5240$  MHz;  $\sigma = 4.702$  S/m;  $\epsilon_r = 36.525$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Left Section  
 DASY4 Configuration:  
 - Probe: EX3DV4 - SN3994; ConvF(5.35, 5.35, 5.35); Calibrated: 7/5/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE3 Sn450; Calibrated: 16/9/2014  
 - Phantom: SAM (20deg probe tilt) with CRP v4.0; Type: QD000P40CC; Serial: TP:xxxx  
 - ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Touch Left/Area Scan (111x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
 Maximum value of SAR (interpolated) = 0.832 W/kg  
**Configuration/Touch Left/Zoom Scan (7x7x12) (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
 Reference Value = 13.11 V/m; Power Drift = 0.07 dB  
 Peak SAR (extrapolated) = 2.21 W/kg  
**SAR(1 g) = 0.680 W/kg; SAR(10 g) = 0.205 W/kg**  
 Maximum value of SAR (measured) = 0.820 W/kg

Touch Left of EUT Wi-Fi 5.2 GHz CH48 - Extract from Original Report

Test Laboratory: UL CCS SAR Lab A

Date: 7/24/2012

**WiFi 5.2GHz**

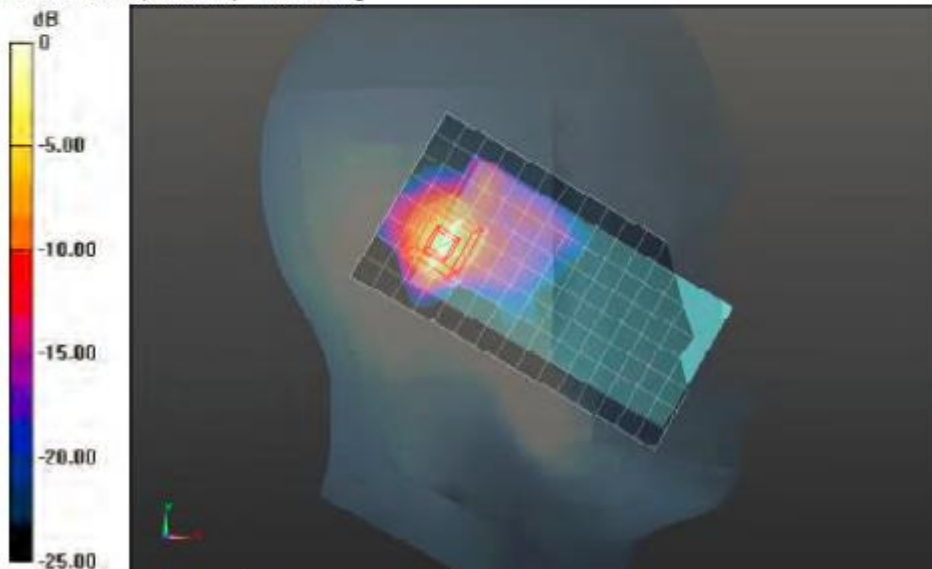
Frequency: 5240 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 25.0°C; Liquid Temperature: 24.0°C  
Medium parameters used:  $f = 5240$  MHz;  $\sigma = 4.788$  mho/m;  $\epsilon_r = 36.021$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1258; Calibrated: 3/8/2012
- Probe: EX3DV4 - SN3772; ConvF(4.88, 4.88, 4.88); Calibrated: 2/16/2012
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: SAM v5.0 (B); Type: QD00P40CD; Serial: 1628

**LHS/Touch\_802.11a\_ch 48/Area Scan (9x16x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 0.879 mW/g

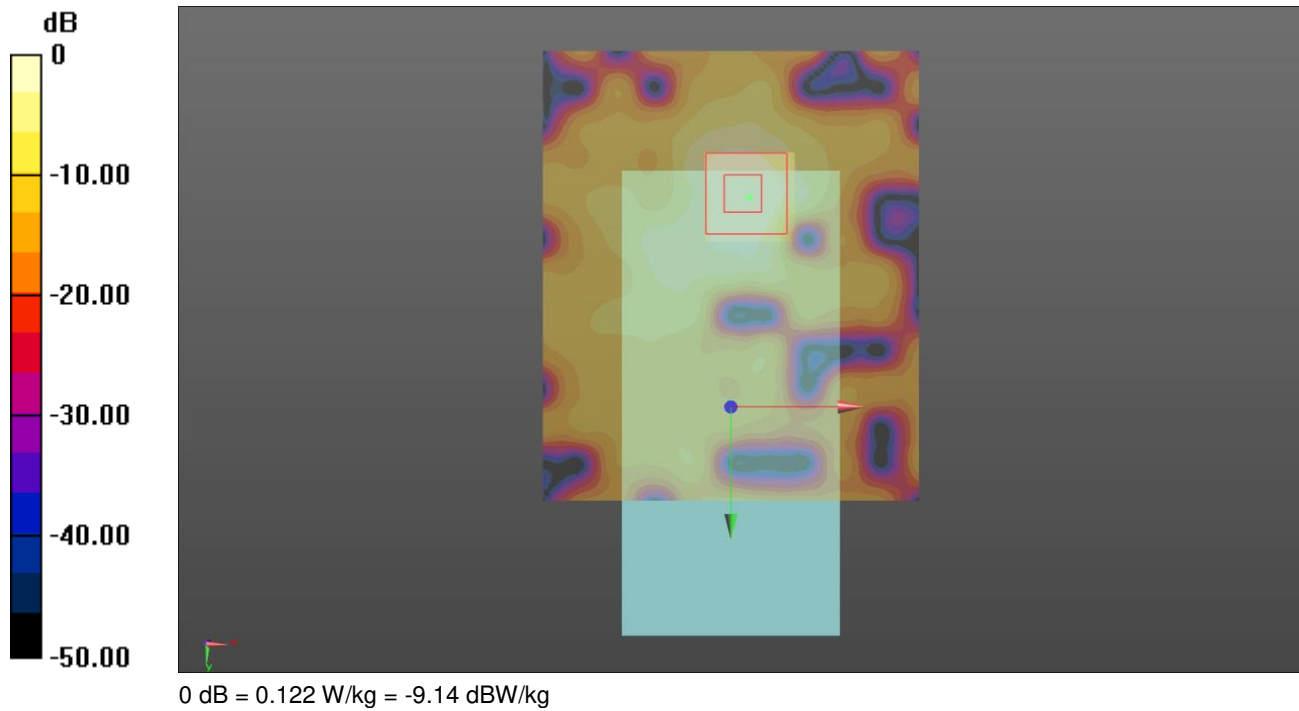
**LHS/Touch\_802.11a\_ch 48/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
Reference Value = 13.921 V/m; Power Drift = -0.08 dB  
Peak SAR (extrapolated) = 2.4050  
**SAR(1 g) = 0.587 mW/g; SAR(10 g) = 0.165 mW/g**  
Maximum value of SAR (measured) = 1.197 mW/g





Front of EUT Wi-Fi 5.2 GHz CH48 - UL VS Ltd

Date: 28/11/2014  
**DUT: A1429**



Communication System: UID 0, WLAN 802.11 (0); Frequency: 5240 MHz; Duty Cycle: 1:1  
 Medium: 5200/5500/5800 MHz MSL Medium parameters used (interpolated):  $f = 5240$  MHz;  $\sigma = 5.15$  S/m;  $\epsilon_r = 49.256$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 DASY4 Configuration:  
 - Probe: EX3DV4 - SN3994; ConvF(4.95, 4.95, 4.95); Calibrated: 7/5/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE3 Sn450; Calibrated: 16/9/2014  
 - Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx  
 - ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Front/Area Scan (101x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.138 W/kg

**Configuration/Front/Zoom Scan (7x7x12) 2 (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.051 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.336 W/kg

**SAR(1 g) = 0.106 W/kg; SAR(10 g) = 0.037 W/kg**

Maximum value of SAR (measured) = 0.122 W/kg

Front of EUT Wi-Fi 5.2 GHz CH48 - Extract from Original Report

Test Laboratory: UL CCS SAR Lab A

Date: 7/25/2012

**WiFi 5.2GHz**

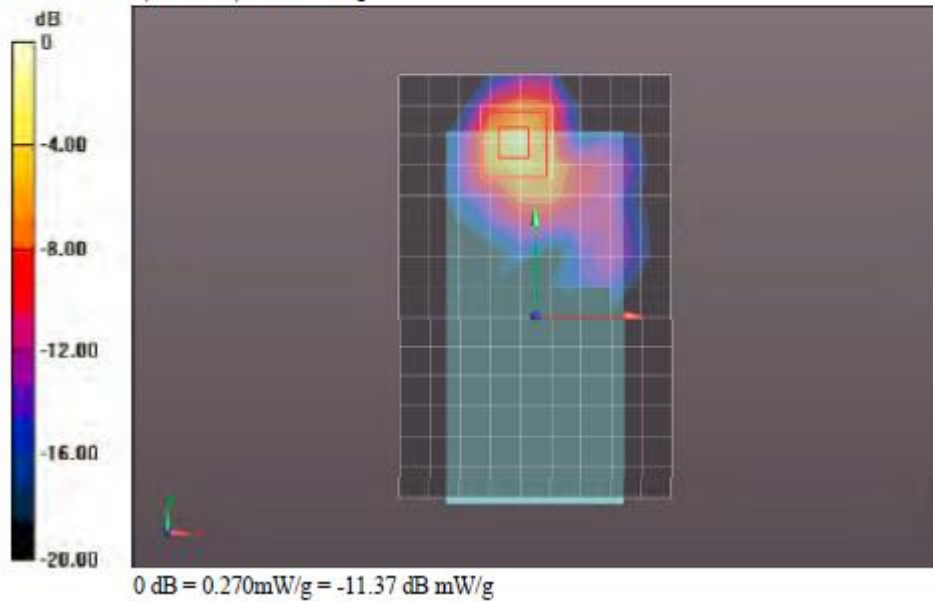
Frequency: 5240 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 25.0°C; Liquid Temperature: 24.0°C  
Medium parameters used:  $f = 5240$  MHz;  $\sigma = 5.254$  mho/m;  $\epsilon_r = 47.689$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1258; Calibrated: 3/8/2012
- Probe: EX3DV4 - SN3772; ConvF(4.17, 4.17, 4.17); Calibrated: 2/16/2012
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: ELI v5.0 (A); Type: QDOVA001BB; Serial: 1120

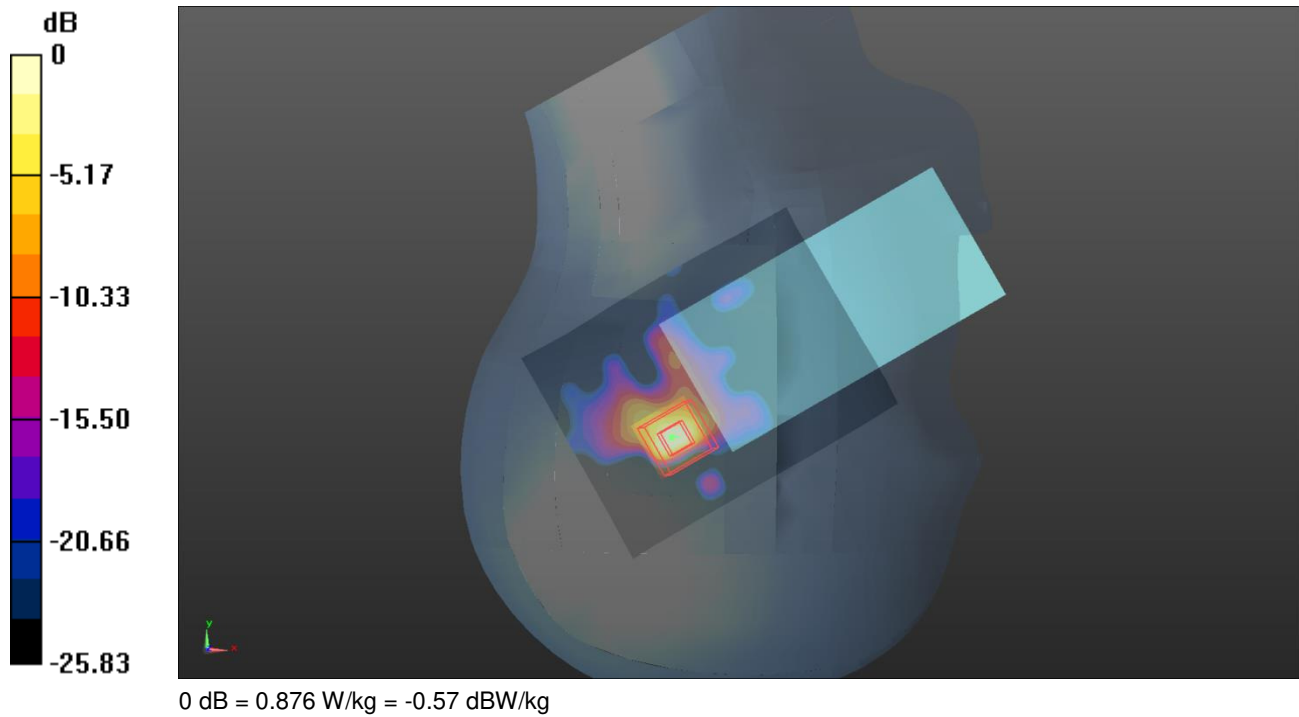
**Front/802.11a\_Ch 48/Area Scan (10x15x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 0.215 mW/g

**Front/802.11a\_Ch 48/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
Reference Value = 6.639 V/m; Power Drift = 0.15 dB  
Peak SAR (extrapolated) = 0.5570  
**SAR(1 g) = 0.130 mW/g; SAR(10 g) = 0.041 mW/g**  
Maximum value of SAR (measured) = 0.269 mW/g



Touch Right of EUT Wi-Fi 5.3 GHz CH52 - UL VS Ltd

Date: 2/12/2014  
 DUT: A1429



Communication System: UID 0, WLAN 802.11 (0); Frequency: 5260 MHz; Duty Cycle: 1:1  
 Medium: 5200/5500/5800 MHz MSL Medium parameters used (interpolated):  $f = 5260$  MHz;  $\sigma = 4.759$  S/m;  $\epsilon_r = 36.067$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Right Section  
 DASY4 Configuration:  
 - Probe: EX3DV4 - SN3994; ConvF(5.08, 5.08, 5.08); Calibrated: 7/5/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE3 Sn450; Calibrated: 16/9/2014  
 - Phantom: SAM (20deg probe tilt) with CRP v4.0; Type: QD000P40CC; Serial: TP:xxxx  
 - ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Touch Right/Area Scan (121x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
 Maximum value of SAR (interpolated) = 1.25 W/kg

**Configuration/Touch Right/Zoom Scan (7x7x12) 2 (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
 Reference Value = 13.93 V/m; Power Drift = -0.07 dB  
 Peak SAR (extrapolated) = 2.23 W/kg  
**SAR(1 g) = 0.663 W/kg; SAR(10 g) = 0.184 W/kg**  
 Maximum value of SAR (measured) = 0.876 W/kg

Touch Right of EUT Wi-Fi 5.3 GHz CH52 - Extract from Original Report

Test Laboratory: UL CCS SAR Lab A

Date: 7/23/2012

**WiFi 5.3GHz**

Frequency: 5280 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 25.0°C; Liquid Temperature: 24.0°C  
Medium parameters used:  $f = 5280$  MHz;  $\sigma = 4.749$  mho/m;  $\epsilon_r = 34.553$ ;  $\rho = 1000$  kg/m<sup>3</sup>

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Electronics: DAE4 Sn1258; Calibrated: 3/8/2012
- Probe: EX3DV4 - SN3772; ConvF(4.62, 4.62, 4.62); Calibrated: 2/16/2012
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: SAM v5.0 (B); Type: QD000P40CD; Serial: 1628

**RHS/Touch\_802.11a\_ch 52/Area Scan (9x16x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 1.015 mW/g

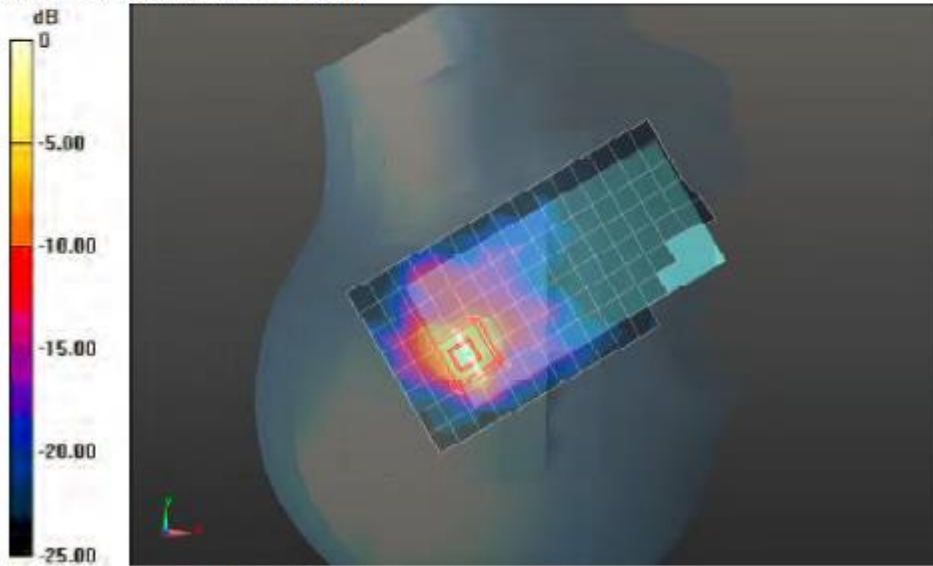
**RHS/Touch\_802.11a\_ch 52/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 14.780 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 2.3860

**SAR(1 g) = 0.575 mW/g; SAR(10 g) = 0.156 mW/g**

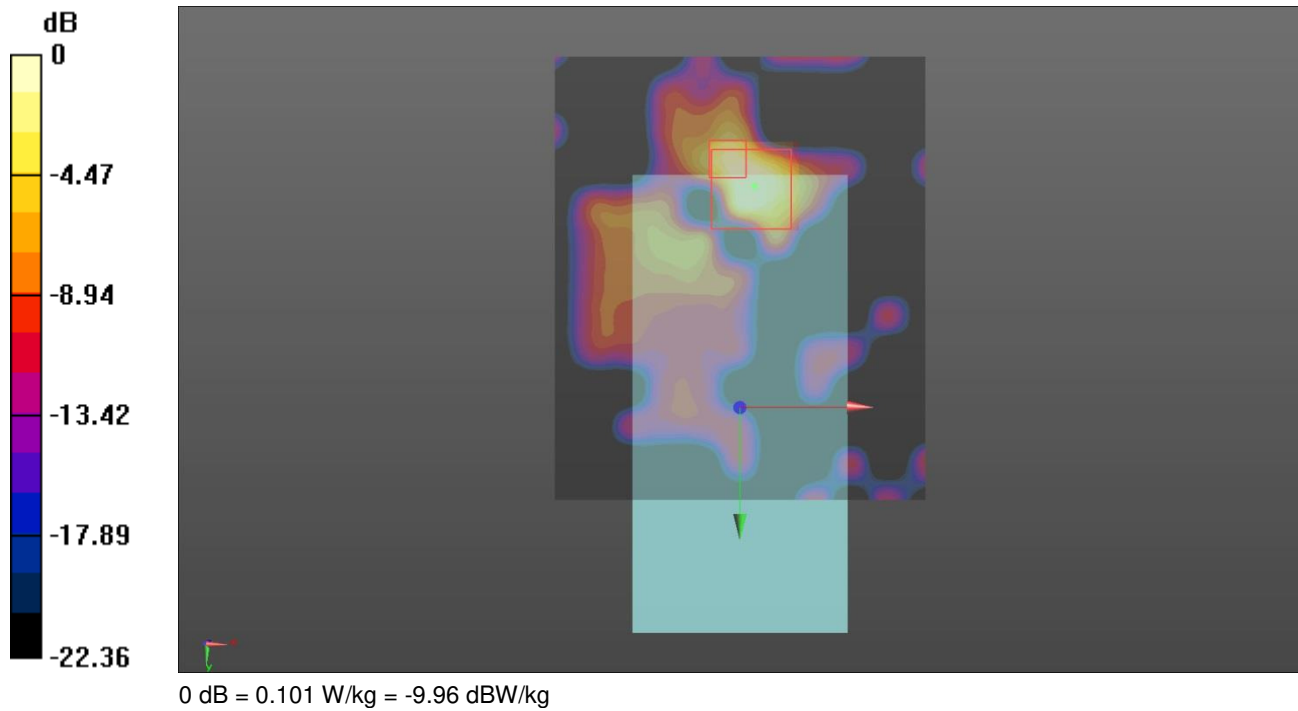
Maximum value of SAR (measured) = 1.214 mW/g



0 dB = 1.210mW/g = 1.66 dB mW/g

Front of EUT Wi-Fi 5.3 GHz CH64 - UL VS Ltd

Date: 1/12/2014  
**DUT: A1429**



Communication System: UID 0, WLAN 802.11 (0); Frequency: 5320 MHz; Duty Cycle: 1:1  
 Medium: 5200/5500/5800 MHz MSL Medium parameters used (interpolated):  $f = 5320$  MHz;  $\sigma = 5.325$  S/m;  $\epsilon_r = 48.288$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
 Phantom section: Flat Section  
 DASY4 Configuration:  
 - Probe: EX3DV4 - SN3994; ConvF(4.73, 4.73, 4.73); Calibrated: 7/5/2014;  
 - Sensor-Surface: 4mm (Mechanical Surface Detection)  
 - Electronics: DAE3 Sn450; Calibrated: 16/9/2014  
 - Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx  
 - ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Front 2/Area Scan (101x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm  
 Maximum value of SAR (interpolated) = 0.202 W/kg  
**Configuration/Front 2/Zoom Scan (7x7x12) 2 (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
 Reference Value = 4.068 V/m; Power Drift = -0.05 dB  
 Peak SAR (extrapolated) = 0.592 W/kg  
**SAR(1 g) = 0.084 W/kg; SAR(10 g) = 0.031 W/kg**  
 Maximum value of SAR (measured) = 0.101 W/kg



Front of EUT Wi-Fi 5.3 GHz CH64 - Extract from Original Report

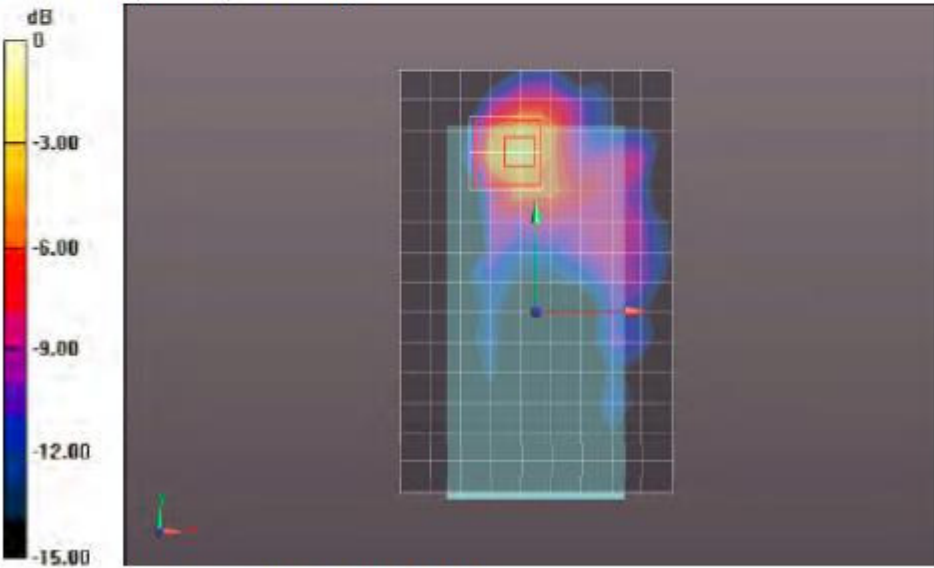
Test Laboratory: UL CCS SAR Lab A Date: 7/25/2012

### WiFi 5.3GHz

Frequency: 5320 MHz; Duty Cycle: 1:1; Room Ambient Temperature: 25.0°C; Liquid Temperature: 24.0°C  
Medium parameters used:  $f = 5320$  MHz;  $\sigma = 5.356$  mho/m;  $\epsilon_r = 47.551$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
DASY5 Configuration:  
- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg  
- Electronics: DAE4 Sn1258; Calibrated: 3/8/2012  
- Probe: EX3DV4 - SN3772; ConvF(3.99, 3.99, 3.99); Calibrated: 2/16/2012  
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection)  
- Phantom: ELI v5.0 (A); Type: QDOVA001BB; Serial: 1120

**Front/802.11a\_Ch 64/Area Scan (10x15x1):** Measurement grid: dx=10mm, dy=10mm  
Maximum value of SAR (measured) = 0.169 mW/g

**Front/802.11a\_Ch 64/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm  
Reference Value = 6.166 V/m; Power Drift = -0.0039 dB  
Peak SAR (extrapolated) = 0.4110  
**SAR(1 g) = 0.114 mW/g; SAR(10 g) = 0.033 mW/g**  
Maximum value of SAR (measured) = 0.237 mW/g

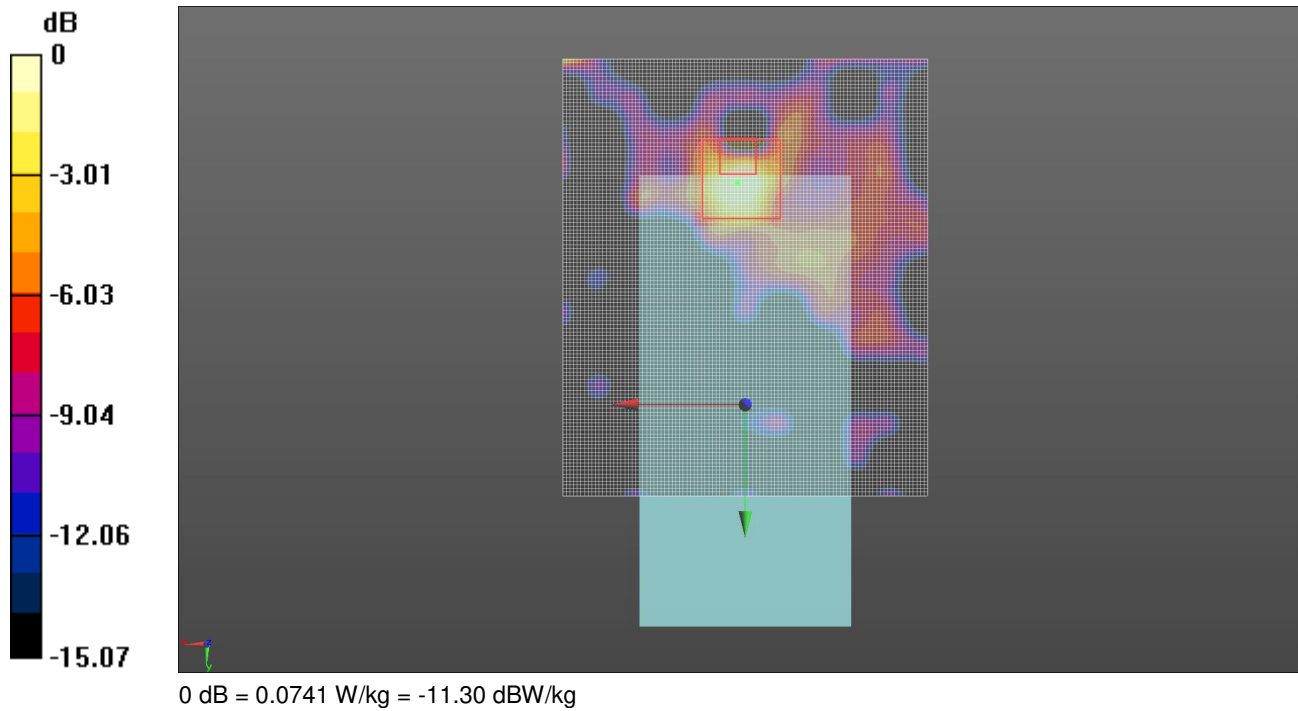


0 dB = 0.240mW/g = -12.40 dB mW/g

Front of EUT Wi-Fi 5.5 GHz CH116 - UL VS Ltd

Date: 1/12/2014

DUT: A1429; Type: Mobile Phone; Serial: Wi-Fi Sample 2



Communication System: UID 0, WLAN 802.11 (0); Frequency: 5580 MHz; Duty Cycle: 1:1  
 Medium: 5200/5500/5800 MHz MSL Medium parameters used (interpolated):  $f = 5580$  MHz;  $\sigma = 5.701$  S/m;  $\epsilon_r = 47.681$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3994; ConvF(3.98, 3.98, 3.98); Calibrated: 7/5/2014;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn450; Calibrated: 16/9/2014
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- ; SEMCAD X Version 14.6.10 (7331)

**Configuration/Front/Area Scan (101x121x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0950 W/kg

**Configuration/Front/Zoom Scan (7x7x12) 2 (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.129 V/m; Power Drift = 0.20 dB

Peak SAR (extrapolated) = 1.08 W/kg

**SAR(1 g) = 0.103 W/kg; SAR(10 g) = 0.032 W/kg**

Maximum value of SAR (measured) = 0.0741 W/kg

Front of EUT Wi-Fi 5.5 GHz CH116 - Extract from Original Report

