

APPENDIX D – DAE3 CALIBRATION CERTIFICATES

**Calibration Laboratory of
Schmid & Partner
Engineering AG**
Zeughausstrasse 43, 8004 Zurich, Switzerland



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Accredited by the Swiss Accreditation Service (SAS)
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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Client **BACL**

Certificate No: **DAE3-456_Nov07**

CALIBRATION CERTIFICATE

Object: **DAE3 - SD 000 D03 AA - SN: 456**

Calibration procedure(s): **QA CAL-06.v12
Calibration procedure for the data acquisition electronics (DAE)**

Calibration date: **November 8, 2007**

Condition of the calibrated item: **In Tolerance**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Fluke Process Calibrator Type 702	SN: 6295803	04-Oct-07 (Elcal AG, No: 6467)	Oct-08
Keithley Multimeter Type 2001	SN: 0810278	03-Oct-07 (Elcal AG, No: 6465)	Oct-08
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Calibrator Box V1.1	SE UMS 006 AB 1004	25-Jun-07 (SPEAG, in house check)	In house check Jun-08

Calibrated by:	Name Dominique Steffen	Function Technician	Signature <i>D. Steffen</i>
Approved by:	Name Fin Bomholt	Function R&D Director	Signature <i>F. Bomholt</i>

Issued: November 8, 2007

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

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Accreditation No.: **SCS 108**

Glossary

DAE data acquisition electronics
Connector angle information used in DASY system to align probe sensor X to the robot coordinate system.

Methods Applied and Interpretation of Parameters

- *DC Voltage Measurement:* Calibration Factor assessed for use in DASY system by comparison with a calibrated instrument traceable to national standards. The figure given corresponds to the full scale range of the voltmeter in the respective range.
- *Connector angle:* The angle of the connector is assessed measuring the angle mechanically by a tool inserted. Uncertainty is not required.
- The following parameters contain technical information as a result from the performance test and require no uncertainty.
- *DC Voltage Measurement Linearity:* Verification of the Linearity at +10% and -10% of the nominal calibration voltage. Influence of offset voltage is included in this measurement.
- *Common mode sensitivity:* Influence of a positive or negative common mode voltage on the differential measurement.
- *Channel separation:* Influence of a voltage on the neighbor channels not subject to an input voltage.
- *AD Converter Values with inputs shorted:* Values on the internal AD converter corresponding to zero input voltage
- *Input Offset Measurement:* Output voltage and statistical results over a large number of zero voltage measurements.
- *Input Offset Current:* Typical value for information; Maximum channel input offset current, not considering the input resistance.
- *Input resistance:* DAE input resistance at the connector, during internal auto-zeroing and during measurement.
- *Low Battery Alarm Voltage:* Typical value for information. Below this voltage, a battery alarm signal is generated.
- *Power consumption:* Typical value for information. Supply currents in various operating modes.

DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = 6.1 μ V, full range = -100...+300 mV

Low Range: 1LSB = 61nV, full range = -1.....+3mV

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Calibration Factors	X	Y	Z
High Range	404.443 \pm 0.1% (k=2)	403.912 \pm 0.1% (k=2)	403.975 \pm 0.1% (k=2)
Low Range	3.94711 \pm 0.7% (k=2)	3.92468 \pm 0.7% (k=2)	3.95492 \pm 0.7% (k=2)

Connector Angle

Connector Angle to be used in DASY system	146 $^{\circ}$ \pm 1 $^{\circ}$
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Appendix

1. DC Voltage Linearity

High Range	Input (μV)	Reading (μV)	Error (%)
Channel X + Input	200000	200000.5	0.00
Channel X + Input	20000	20005.89	0.03
Channel X - Input	20000	-20004.96	0.02
Channel Y + Input	200000	200000.4	0.00
Channel Y + Input	20000	20005.26	0.03
Channel Y - Input	20000	-20006.07	0.03
Channel Z + Input	200000	200000.2	0.00
Channel Z + Input	20000	20003.44	0.02
Channel Z - Input	20000	-20004.74	0.02

Low Range	Input (μV)	Reading (μV)	Error (%)
Channel X + Input	2000	2000	0.00
Channel X + Input	200	199.91	-0.05
Channel X - Input	200	-200.15	0.08
Channel Y + Input	2000	2000.1	0.00
Channel Y + Input	200	199.14	-0.43
Channel Y - Input	200	-200.65	0.33
Channel Z + Input	2000	2000.1	0.00
Channel Z + Input	200	199.35	-0.32
Channel Z - Input	200	-201.29	0.64

2. Common mode sensitivity

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	Common mode Input Voltage (mV)	High Range Average Reading (μV)	Low Range Average Reading (μV)
Channel X	200	-1.83	-4.02
	- 200	5.58	5.21
Channel Y	200	-7.40	-6.84
	- 200	5.85	6.13
Channel Z	200	10.66	10.58
	- 200	-12.52	-12.06

3. Channel separation

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	Input Voltage (mV)	Channel X (μV)	Channel Y (μV)	Channel Z (μV)
Channel X	200	-	1.85	0.50
Channel Y	200	0.11	-	1.74
Channel Z	200	-0.78	-0.33	-

4. AD-Converter Values with inputs shorted

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

	High Range (LSB)	Low Range (LSB)
Channel X	16313	16505
Channel Y	15836	15211
Channel Z	16035	16922

5. Input Offset Measurement

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Input 10M Ω

	Average (μ V)	min. Offset (μ V)	max. Offset (μ V)	Std. Deviation (μ V)
Channel X	-0.48	-1.25	1.04	0.34
Channel Y	0.15	-1.13	2.26	0.37
Channel Z	0.69	-0.14	3.04	0.33

6. Input Offset Current

Nominal Input circuitry offset current on all channels: <25fA

7. Input Resistance

	Zeroing (MOhm)	Measuring (MOhm)
Channel X	0.2001	199.3
Channel Y	0.2001	199.0
Channel Z	0.1998	199.3

8. Low Battery Alarm Voltage (verified during pre test)

Typical values	Alarm Level (VDC)
Supply (+ Vcc)	+7.9
Supply (- Vcc)	-7.6

9. Power Consumption (verified during pre test)

Typical values	Switched off (mA)	Stand by (mA)	Transmitting (mA)
Supply (+ Vcc)	+0.0	+6	+14
Supply (- Vcc)	-0.01	-8	-9

APPENDIX E - TEST SYSTEM VERIFICATIONS SCANS

Measurement Result

System Validation Dipole: D900V2-SN: 122

Environmental Conditions

Ambient Temperature:	22° C
Relative Humidity:	72%
ATM Pressure:	1033 mbar

* Testing was performed by Eric Hong on 2007-2-21.

Frequency [MHz]	Parameters	Liquid Temp [°C]	Target Value	Measured Value	Deviation [%]	Limits [%]
835	ϵ_r	22	41.5	41.3	-0.5	± 5
	σ	22	0.90	0.89	-1.11	± 5
	1g SAR	22	9.5	10.0	5.26	± 10

ϵ_r = relative permittivity, σ = conductivity and $\rho=1000\text{kg/m}^3$

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**System Performance Check for 835 MHz****Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN: 122**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 41.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

d=15mm, Pin=0.5W/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 5.42 mW/g

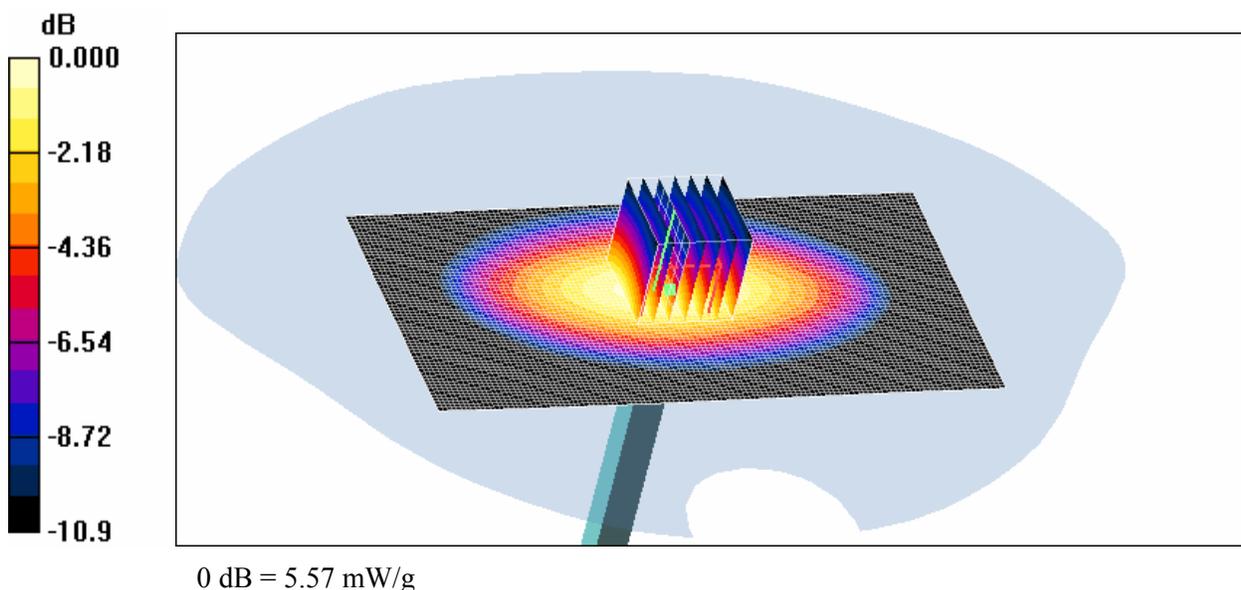
d=15mm, Pin=0.5W/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,
 dy=5mm, dz=5mm

Reference Value = 86.5 V/m; Power Drift = -0.059 dB

Peak SAR (extrapolated) = 8.03 W/kg

SAR(1 g) = 5.0 mW/g; SAR(10 g) = 3.3 mW/g

Maximum value of SAR (measured) = 5.57 mW/g



APPENDIX F - EUT SCANS

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)

EUT with antenna parallel back touch to the flat phantom with Compaq (Evo N610c) setup (Middle Channel)

ZTE Corporation; Type: AC8710; Serial: B1607

Communication System: CW (CDMA 1X); Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 41.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.82, 6.82, 6.82); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna parallel back touch to flat phantom with Compaq (Evo N610c) setup/Area Scan

(71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.657 mW/g

EUT with antenna parallel back touch to flat phantom with Compaq (Evo N610c) setup/Zoom Scan

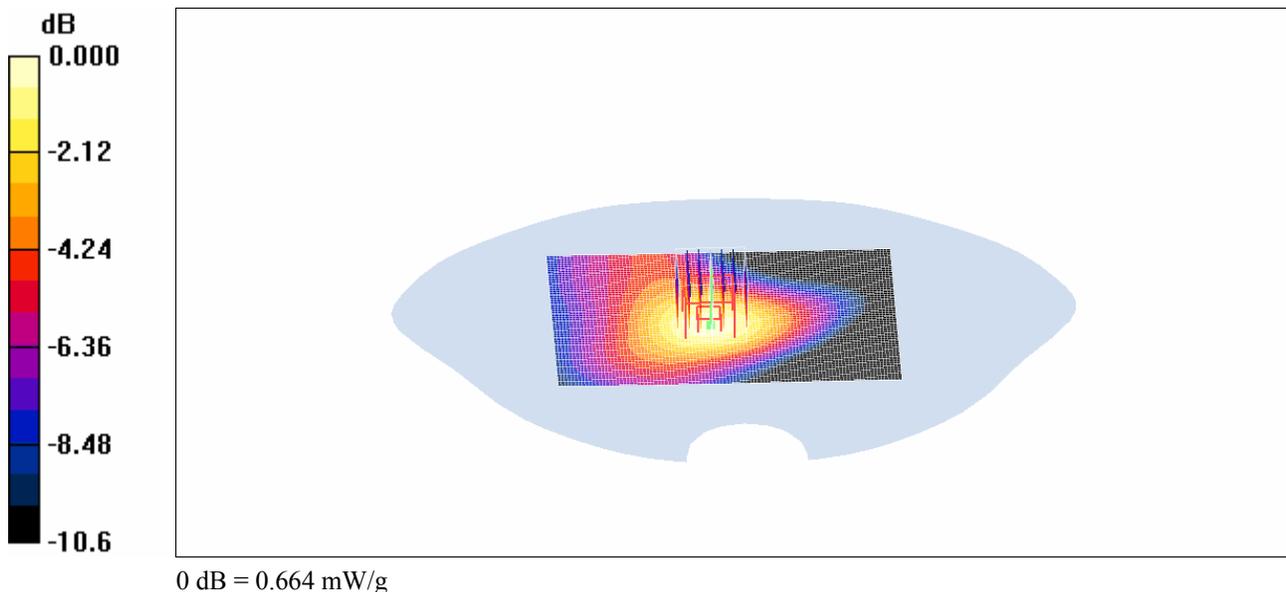
(7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.2 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.687 W/kg

SAR(1 g) = 0.639 mW/g; SAR(10 g) = 0.526 mW/g

Maximum value of SAR (measured) = 0.664 mW/g



Plot#1

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**EUT with antenna perpendicular touch to the flat phantom with Compaq (Evo N610c) setup (Middle Channel)****ZTE Corporation; Type: AC8710; Serial: B1607**

Communication System: CW (CDMA 1X); Frequency: 836.52 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

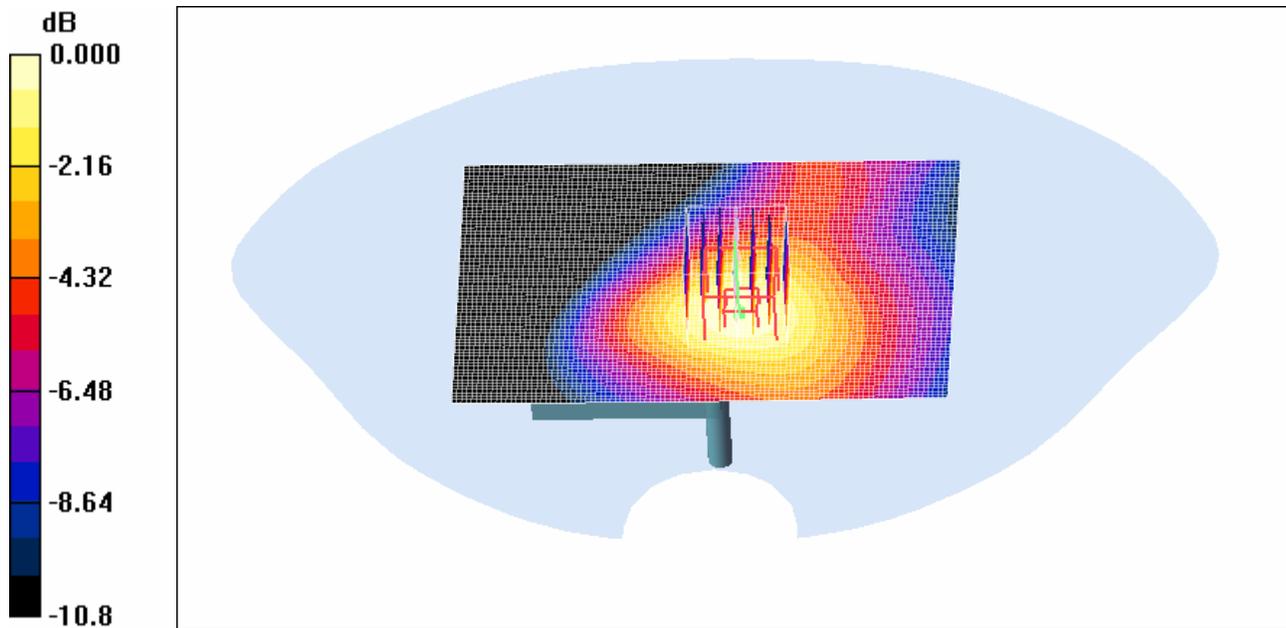
DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna perpendicular back touch to flat phantom with Compaq (Evo N610c) setup/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.587 mW/g

EUT with antenna perpendicular back touch to flat phantom with Compaq (Evo N610c) setup/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 24.1 V/m; Power Drift = -0.08 dB
 Peak SAR (extrapolated) = 0.714 W/kg
SAR(1 g) = 0.547 mW/g; SAR(10 g) = 0.359 mW/g

Maximum value of SAR (measured) = 0.591 mW/g



0 dB = 0.591 mW/g

Plot#2

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**EUT with antenna parallel back touch to the flat phantom with Compaq (Evo N610c) setup (Middle Channel)****ZTE Corporation; Type: AC8710; Serial: B1607**

Communication System: CW (CDMA 1X EV-DO); Frequency: 836.52 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna parallel back touch to flat phantom with Compaq (Evo N610c) setup/Area Scan**(71x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.739 mW/g

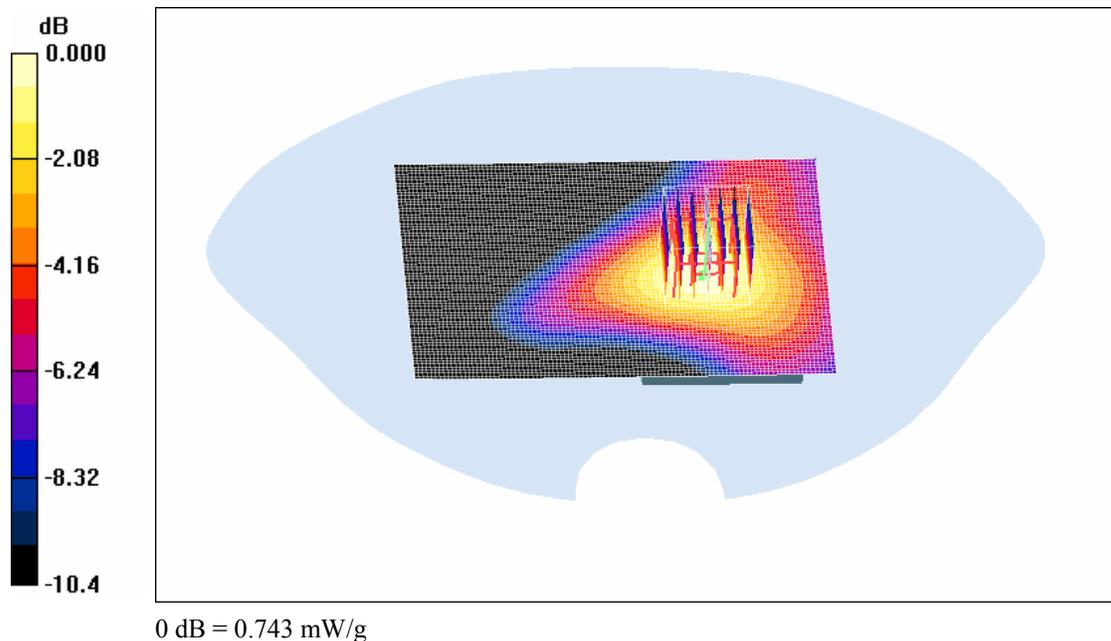
EUT with antenna parallel back touch to flat phantom with Compaq (Evo N610c) setup/Zoom Scan**(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.0 V/m; Power Drift = 0.058 dB

Peak SAR (extrapolated) = 0.743 W/kg

SAR(1 g) = 0.703 mW/g; SAR(10 g) = 0.532 mW/g

Maximum value of SAR (measured) = 0.743 mW/g

**Plot#3**

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**EUT with antenna perpendicular touch to the flat phantom with Compaq (Evo N610c) setup (Middle Channel)****ZTE Corporation; Type: AC8710; Serial: B1607**

Communication System: CW (CDMA 1X EV-DO); Frequency: 836.52 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

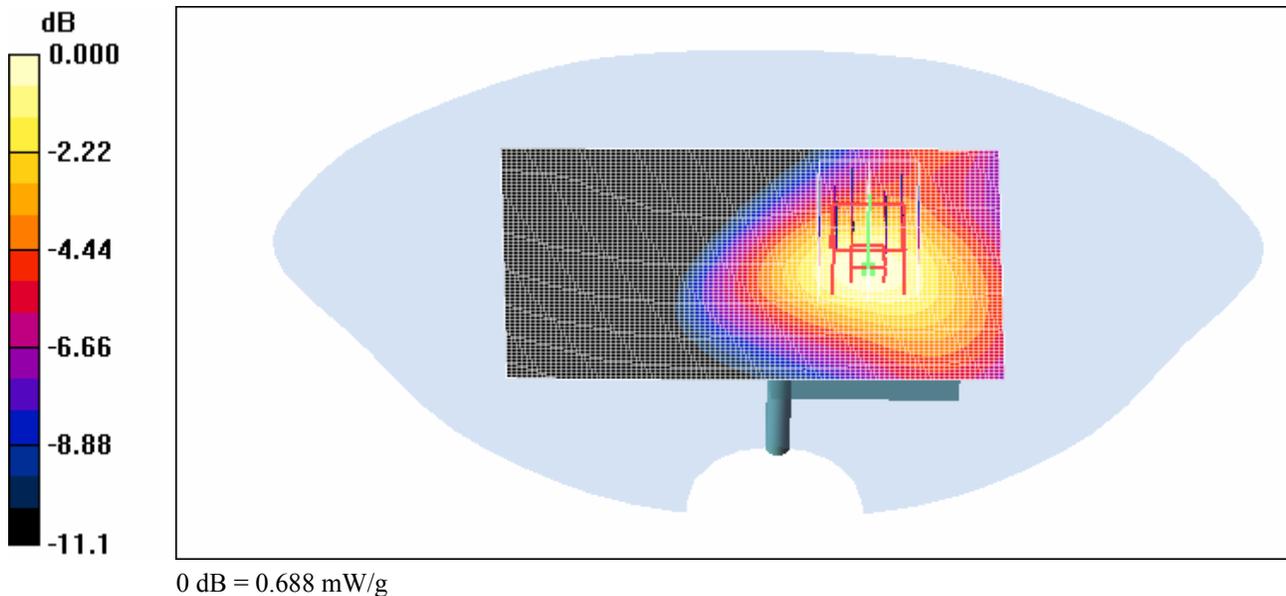
DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna perpendicular back touch to flat phantom with Compaq (Evo N610c) setup/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.671 mW/g

EUT with antenna perpendicular back touch to flat phantom with Compaq (Evo N610c) setup/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 18.8 V/m; Power Drift = -0.02 dB
 Peak SAR (extrapolated) = 0.946 W/kg
SAR(1 g) = 0.626 mW/g; SAR(10 g) = 0.406 mW/g

Maximum value of SAR (measured) = 0.688 mW/g

**Plot#4**

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**EUT with antenna parallel back touch to the flat phantom with Dell (Inspiron 1300) setup (Middle Channel)****ZTE Corporation; Type: AC8710; Serial: B1607**

Communication System: CW (CDMA 1X); Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna parallel back touch to flat phantom with Dell (Inspiron 1300) setup/Area Scan (71x101x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.710 mW/g

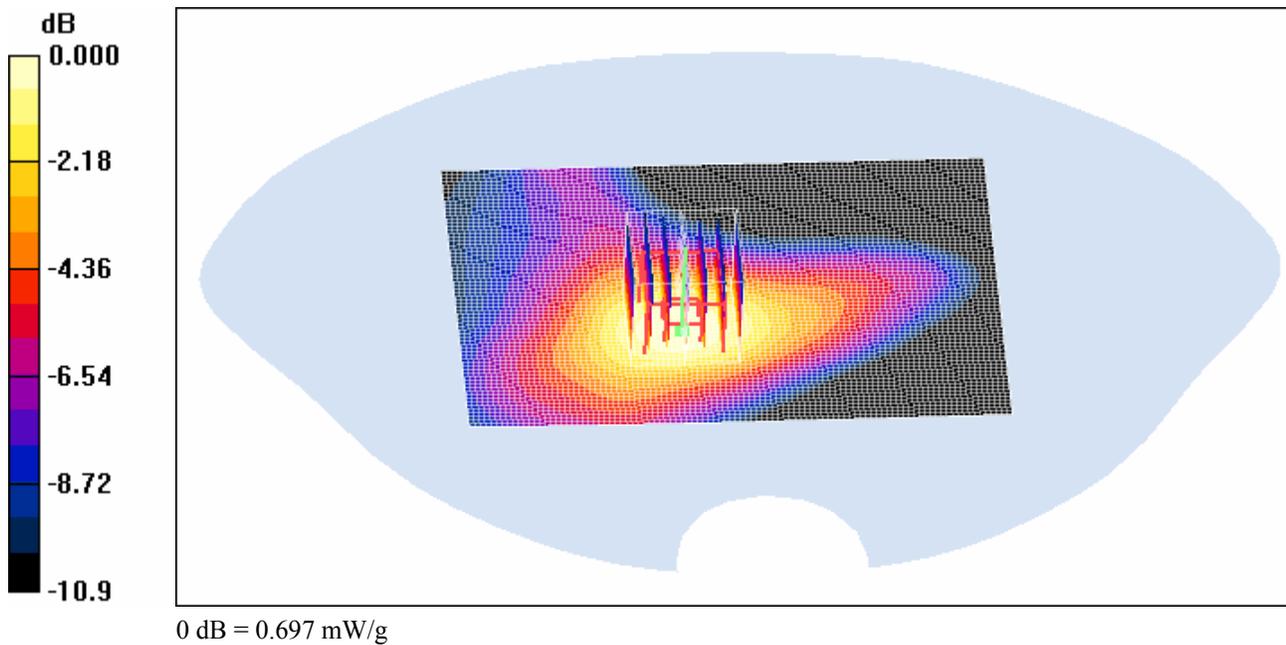
EUT with antenna parallel back touch to flat phantom with Dell (Inspiron 1300) setup/Zoom Scan**(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.2 V/m; Power Drift = -0.082 dB

Peak SAR (extrapolated) = 0.960 W/kg

SAR(1 g) = 0.651 mW/g; SAR(10 g) = 0.421 mW/g

Maximum value of SAR (measured) = 0.697 mW/g

**Plot#5**

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**EUT with antenna perpendicular touch to the flat phantom with Dell (Inspiron 1300) setup (Middle Channel)
ZTE Corporation; Type: AC8710; Serial: B1607**

Communication System: CW (CDMA 1X); Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

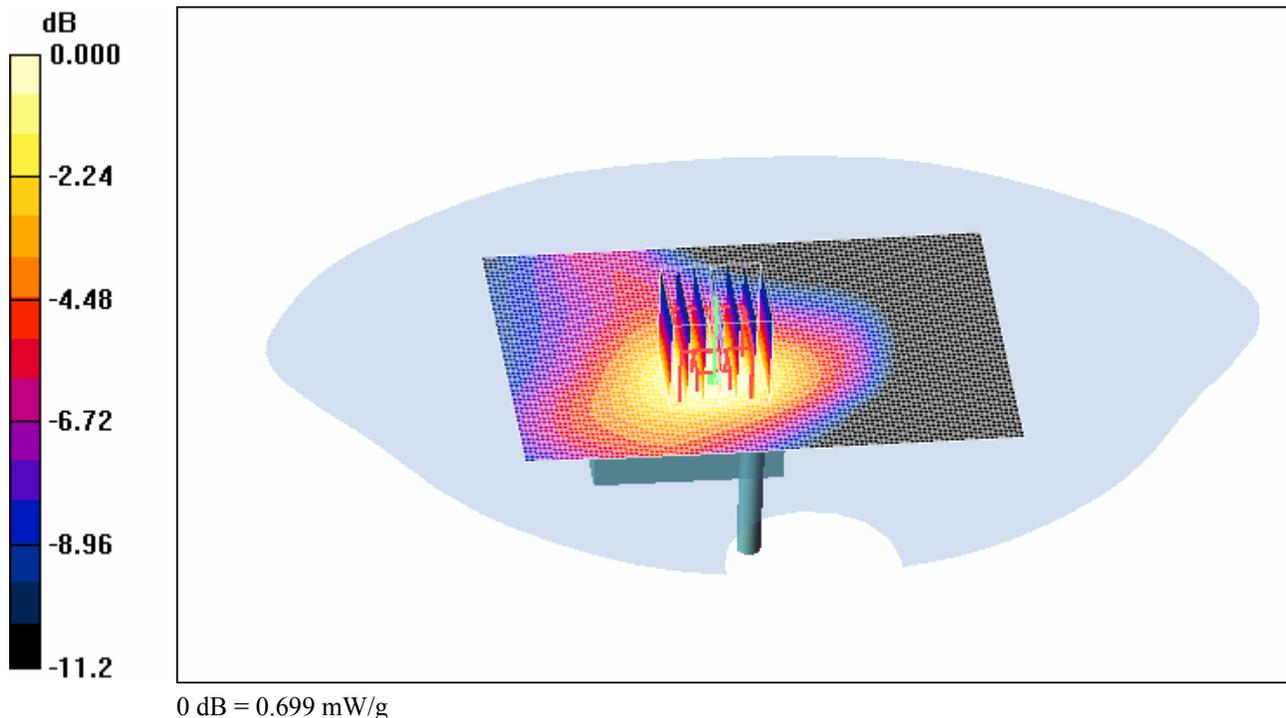
DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna perpendicular back touch to flat phantom with Dell (Inspiron 1300) setup/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.720 mW/g

EUT with antenna perpendicular back touch to flat phantom with Dell (Inspiron 1300) setup/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 20.9 V/m; Power Drift = 0.116 dB
Peak SAR (extrapolated) = 0.971 W/kg
SAR(1 g) = 0.649 mW/g; SAR(10 g) = 0.415 mW/g

Maximum value of SAR (measured) = 0.699 mW/g

**Plot#6**

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**EUT with antenna parallel back touch to the flat phantom with Dell (Inspiron 1300) setup (Middle Channel)****ZTE Corporation; Type: AC8710; Serial: B1607**

Communication System: CW (CDMA 1X EV-DO); Frequency: 836.52 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna parallel back touch to flat phantom with Dell (Inspiron 1300) setup/Area Scan (71x101x1):

Measurement grid: $dx=15$ mm, $dy=15$ mm
 Maximum value of SAR (interpolated) = 0.625 mW/g

EUT with antenna parallel back touch to flat phantom with Dell (Inspiron 1300) setup/Zoom Scan

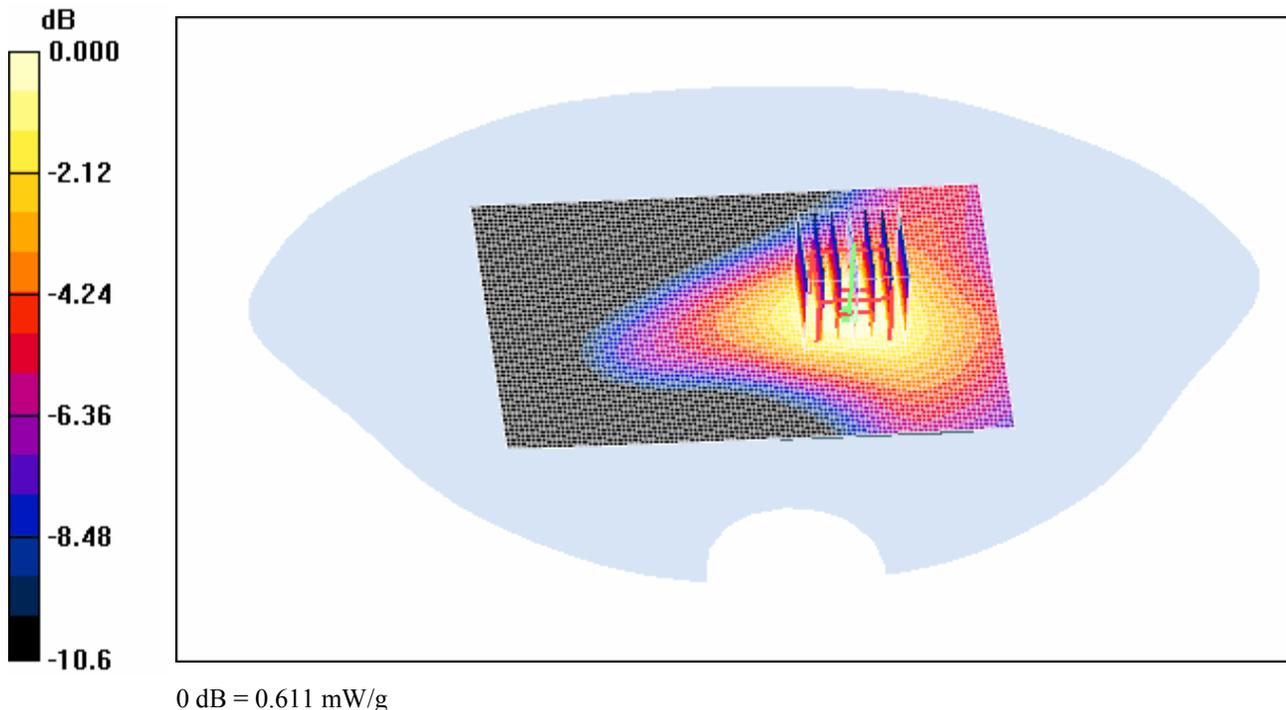
(7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 18.7 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 0.640 W/kg

SAR(1 g) = 0.576 mW/g; SAR(10 g) = 0.426 mW/g

Maximum value of SAR (measured) = 0.611 mW/g

**Plot#7**

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**EUT with antenna perpendicular touch to the flat phantom with Dell (Inspiron 1300) setup (Middle Channel)****ZTE Corporation; Type: AC8710; Serial: B1607**

Communication System: CW (CDMA 1X EV-DO); Frequency: 836.52 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

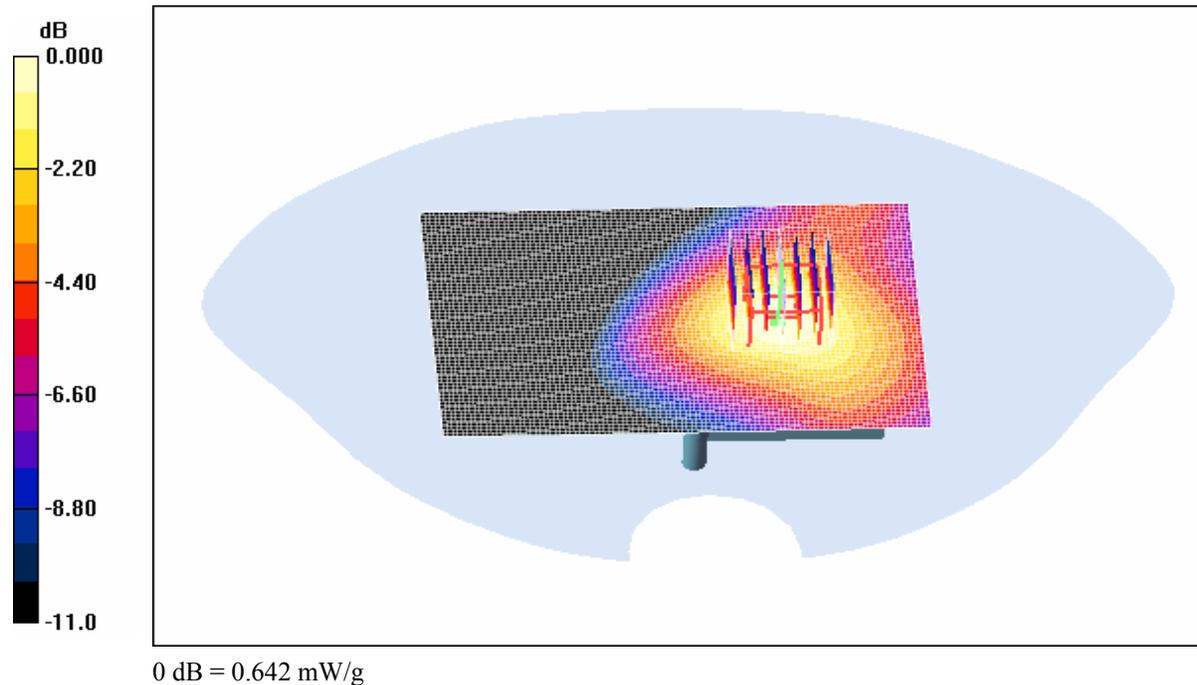
DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna perpendicular back touch to flat phantom with Dell (Inspiron 1300) setup/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.641 mW/g

EUT with antenna perpendicular back touch to flat phantom with Dell (Inspiron 1300) setup/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 19.4 V/m; Power Drift = 0.004 dB
 Peak SAR (extrapolated) = 0.887 W/kg
SAR(1 g) = 0.595 mW/g; SAR(10 g) = 0.387 mW/g

Maximum value of SAR (measured) = 0.642 mW/g

**Plot#8**

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**EUT with antenna parallel back touch to the flat phantom with IBM (ThinkPad T40) setup (Middle Channel)****ZTE Corporation; Type: AC8710; Serial: B1607**

Communication System: CW (CDMA 1X); Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna parallel back touch to flat phantom with IBM (ThinkPad T40) setup/Area Scan**(71x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.03 mW/g

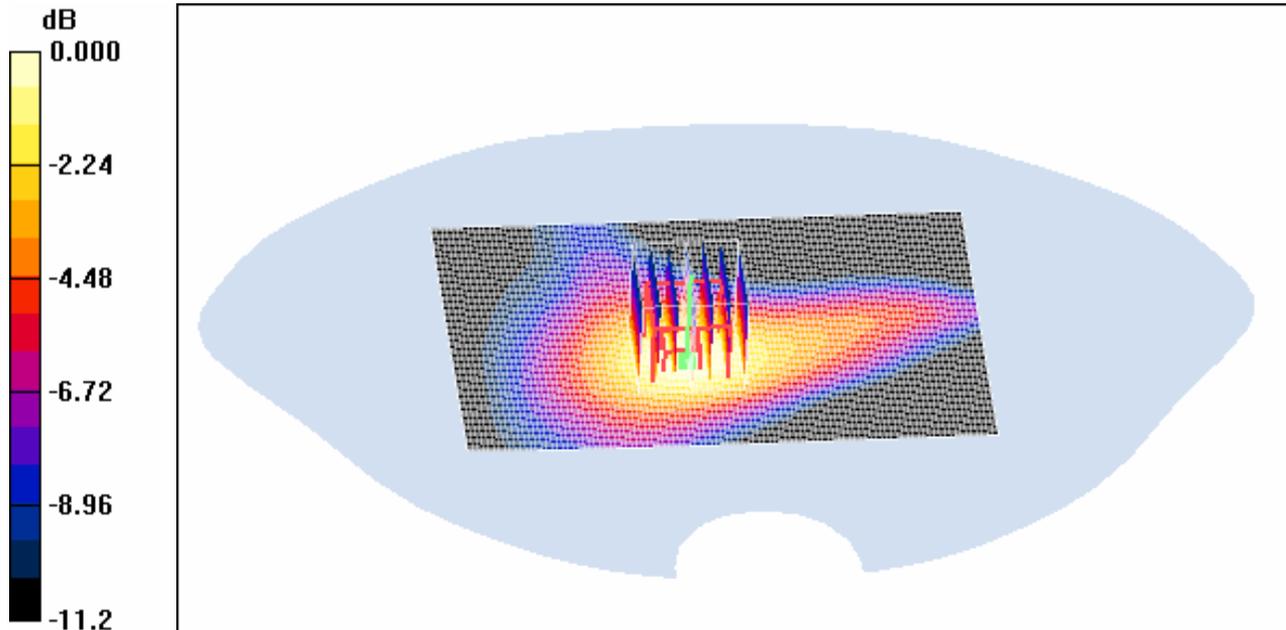
EUT with antenna parallel back touch to flat phantom with IBM (ThinkPad T40) setup/Zoom Scan**(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.3 V/m; Power Drift = 0.035 dB

Peak SAR (extrapolated) = 1.39 W/kg

SAR(1 g) = 0.922 mW/g; SAR(10 g) = 0.591 mW/g

Maximum value of SAR (measured) = 0.989 mW/g



0 dB = 0.989 mW/g

Plot#9

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**EUT with antenna parallel back touch to the flat phantom with IBM (ThinkPad T40) setup (Low Channel)****ZTE Corporation; Type: AC8710; Serial: B1607**

Communication System: CW (CDMA 1X); Frequency: 824.7 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna parallel back touch to flat phantom with IBM (ThinkPad T40) setup/Area Scan

(71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.843 mW/g

EUT with antenna parallel back touch to flat phantom with IBM (ThinkPad T40) setup/Zoom Scan

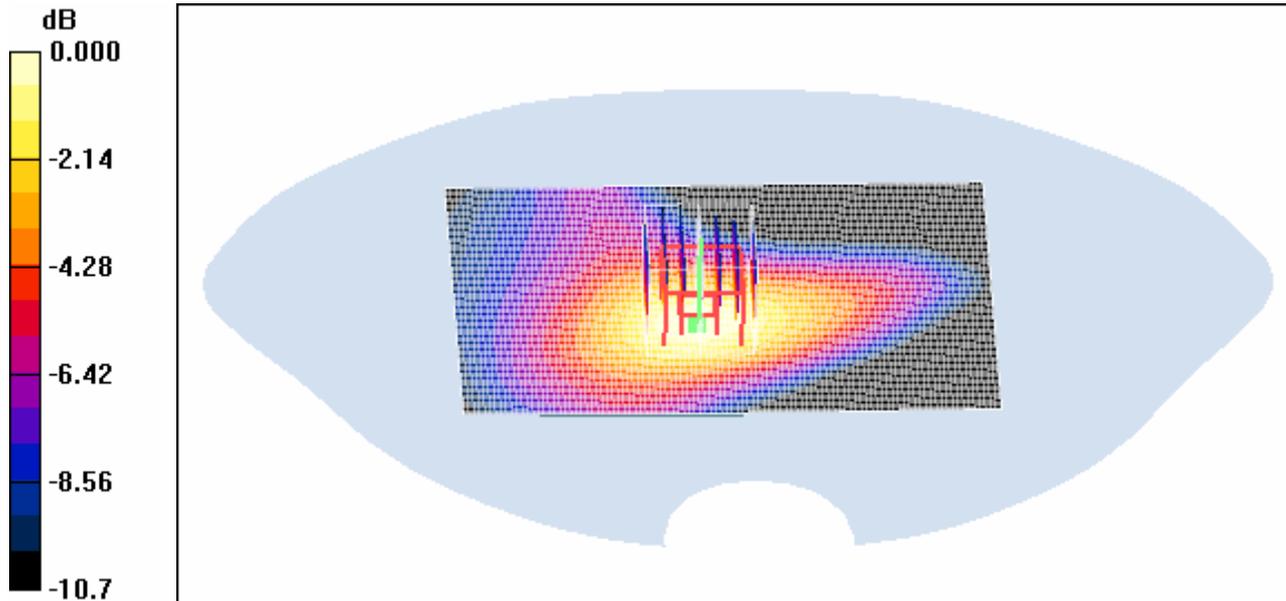
(7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 28.4 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.783 mW/g; SAR(10 g) = 0.511 mW/g

Maximum value of SAR (measured) = 0.848 mW/g



0 dB = 0.848 mW/g

Plot#10

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**EUT with antenna parallel back touch to the flat phantom with IBM (ThinkPad T40) setup (High Channel)****ZTE Corporation; Type: AC8710; Serial: B1607**

Communication System: CW (CDMA 1X); Frequency: 848.31 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna parallel back touch to flat phantom with IBM (ThinkPad T40) setup/Area Scan**(71x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.648 mW/g

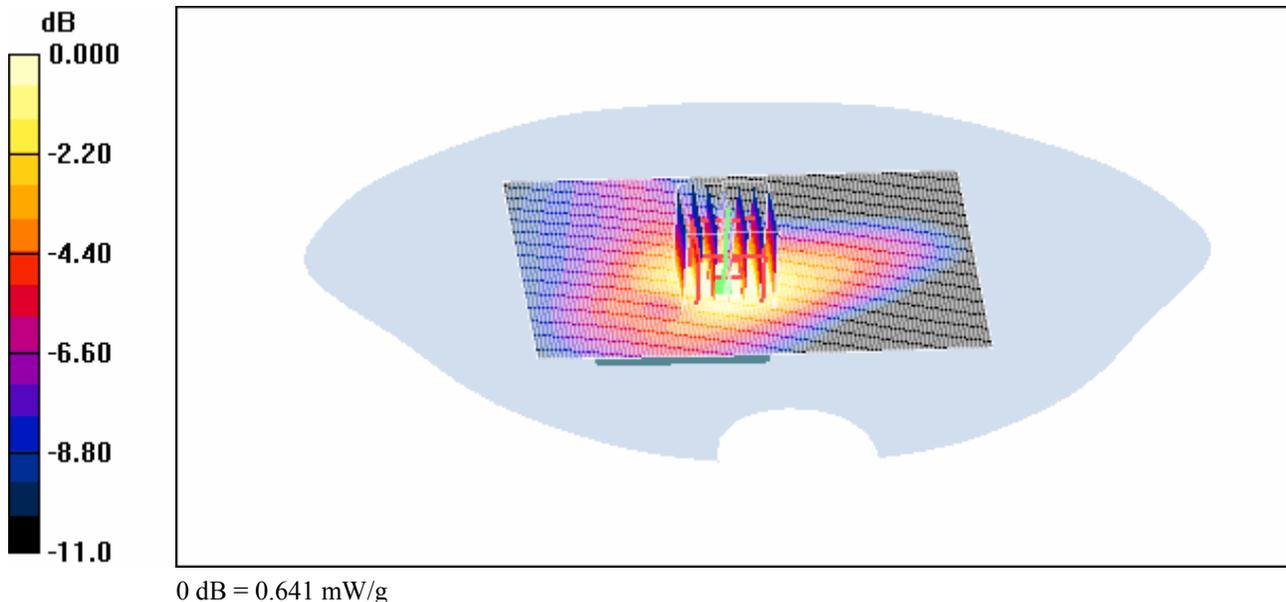
EUT with antenna parallel back touch to flat phantom with IBM (ThinkPad T40) setup/Zoom Scan**(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.7 V/m; Power Drift = 0.334 dB

Peak SAR (extrapolated) = 0.865 W/kg

SAR(1 g) = 0.587 mW/g; SAR(10 g) = 0.381 mW/g

Maximum value of SAR (measured) = 0.641 mW/g

**Plot#11**

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**EUT with antenna parallel back touch to the flat phantom with IBM (ThinkPad T40) setup (Middle Channel)****ZTE Corporation; Type: AC8710; Serial: B1607**

Communication System: CW (CDMA 1X); Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna perpendicular back touch to flat phantom with IBM (ThinkPad T40) setup/Area Scan**(71x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.658 mW/g

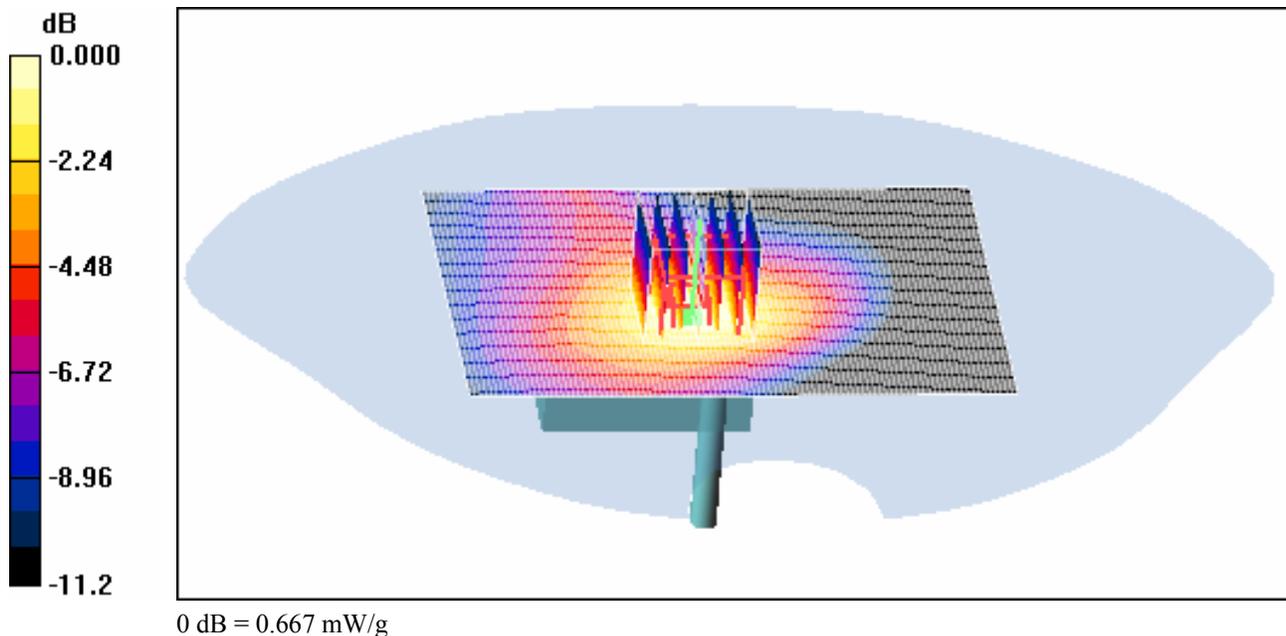
EUT with antenna perpendicular back touch to flat phantom with IBM (ThinkPad T40) setup/Zoom Scan**(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.9 V/m; Power Drift = -0.229 dB

Peak SAR (extrapolated) = 0.916 W/kg

SAR(1 g) = 0.605 mW/g; SAR(10 g) = 0.386 mW/g

Maximum value of SAR (measured) = 0.667 mW/g

**Plot#12**

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**EUT with antenna parallel back touch to the flat phantom with IBM (ThinkPad T40) setup (Middle Channel)****ZTE Corporation; Type: AC8710; Serial: B1607**

Communication System: CW (CDMA 1X EV-DO); Frequency: 836.52 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna parallel back touch to flat phantom with IBM (ThinkPad T40) setup/Area Scan**(71x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.725 mW/g

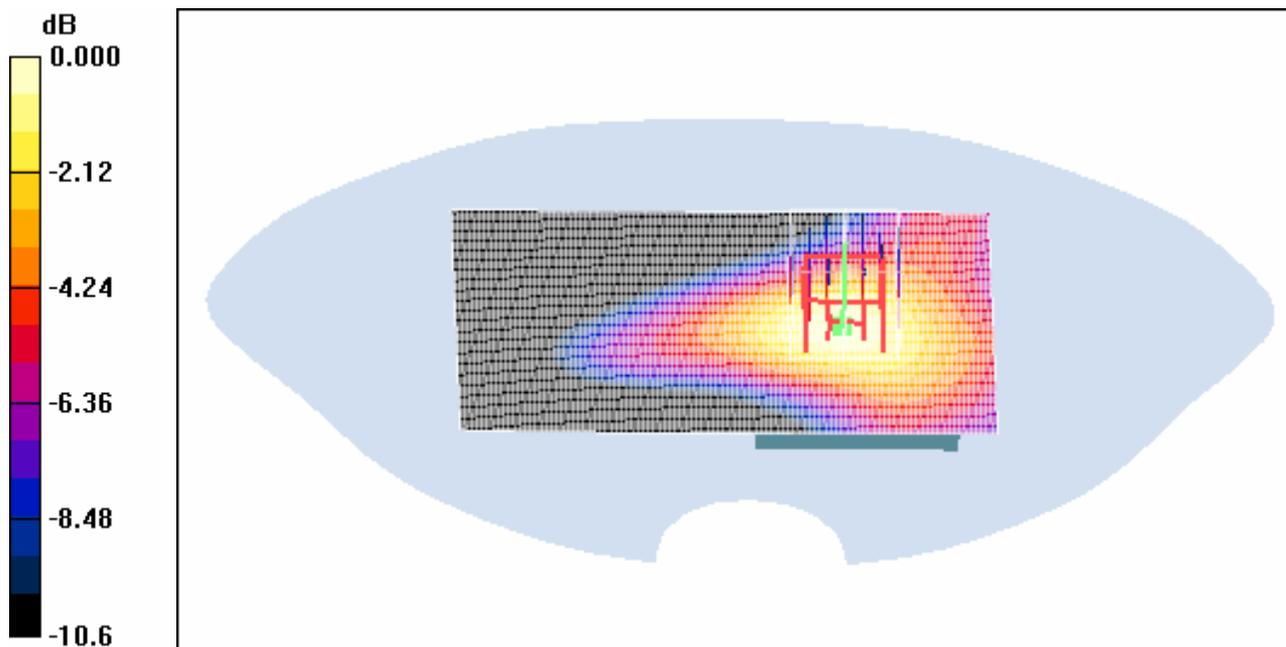
EUT with antenna parallel back touch to flat phantom with IBM (ThinkPad T40) setup/Zoom Scan**(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.6 V/m; Power Drift = -0.111 dB

Peak SAR (extrapolated) = 0.819 W/kg

SAR(1 g) = 0.694 mW/g; SAR(10 g) = 0.526 mW/g

Maximum value of SAR (measured) = 0.729 mW/g

**Plot#13**

Test Laboratory: Bay Area Compliance Lab Corp. (BACL)**EUT with antenna perpendicular back touch to the flat phantom with IBM (ThinkPad T40) setup (Middle Channel)****ZTE Corporation; Type: AC8710; Serial: B1607**

Communication System: CW (CDMA 1X EV-DO); Frequency: 836.52 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 835$ MHz; $\sigma = 0.95$ mho/m; $\epsilon_r = 55.6$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

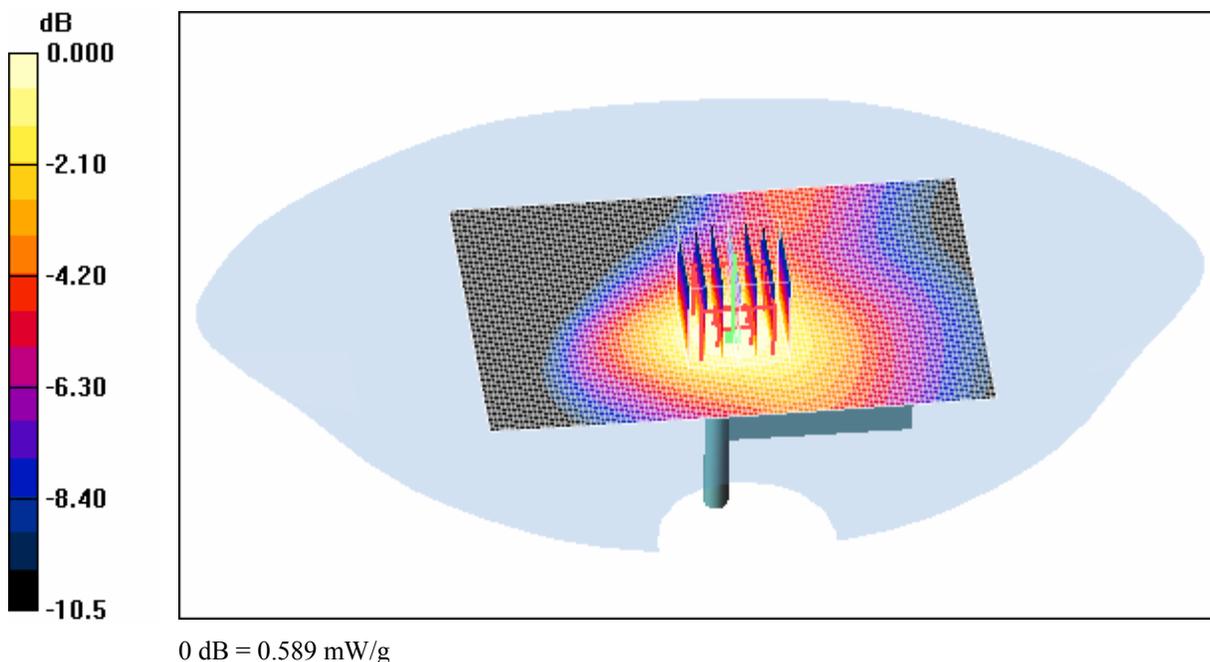
DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.47, 6.47, 6.47); Calibrated: 8/28/2007
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 11/8/2007
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Post processing SW: SEMCAD, V1.8 Build 161

EUT with antenna perpendicular back touch to flat phantom with IBM (ThinkPad T40) setup/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (interpolated) = 0.589 mW/g

EUT with antenna perpendicular back touch to flat phantom with IBM (ThinkPad T40) setup/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 24.1 V/m; Power Drift = -0.271 dB
 Peak SAR (extrapolated) = 0.810 W/kg
SAR(1 g) = 0.541 mW/g; SAR(10 g) = 0.355 mW/g

Maximum value of SAR (measured) = 0.589 mW/g

**Plot#14**

APPENDIX G – CONDUCTED OUTPUT POWER MEASUREMENT

Provision Applicable

The measured peak output power should be greater and within 5% than EMI measurement.

Test Procedure

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

Test Results**CDMA 1X**

Frequency (MHz)	Output Power (dBm)
824.7	23.95
836.52	23.95
848.31	23.87

CDMA 1X EV-DO

Frequency (MHz)	Output Power (dBm)
824.7	23.45
836.52	23.85
848.31	23.48

APPENDIX H – EUT TEST SET UP PHOTOS

EUT with antenna parallel back touch to the flat phantom with Compaq laptop (Evo N610c) setup



EUT with antenna perpendicular to the flat phantom with Compaq laptop (Evo N610c) setup



EUT with antenna parallel back touch to the flat phantom with Compaq laptop (Evo N610c) setup



EUT with antenna perpendicular to the flat phantom with Compaq laptop (Evo N610c) setup



EUT with antenna parallel back touch to the flat phantom with Dell laptop (Inspiron 1300)



EUT with antenna perpendicular back touch to the flat phantom with Dell laptop (Inspiron 1300)



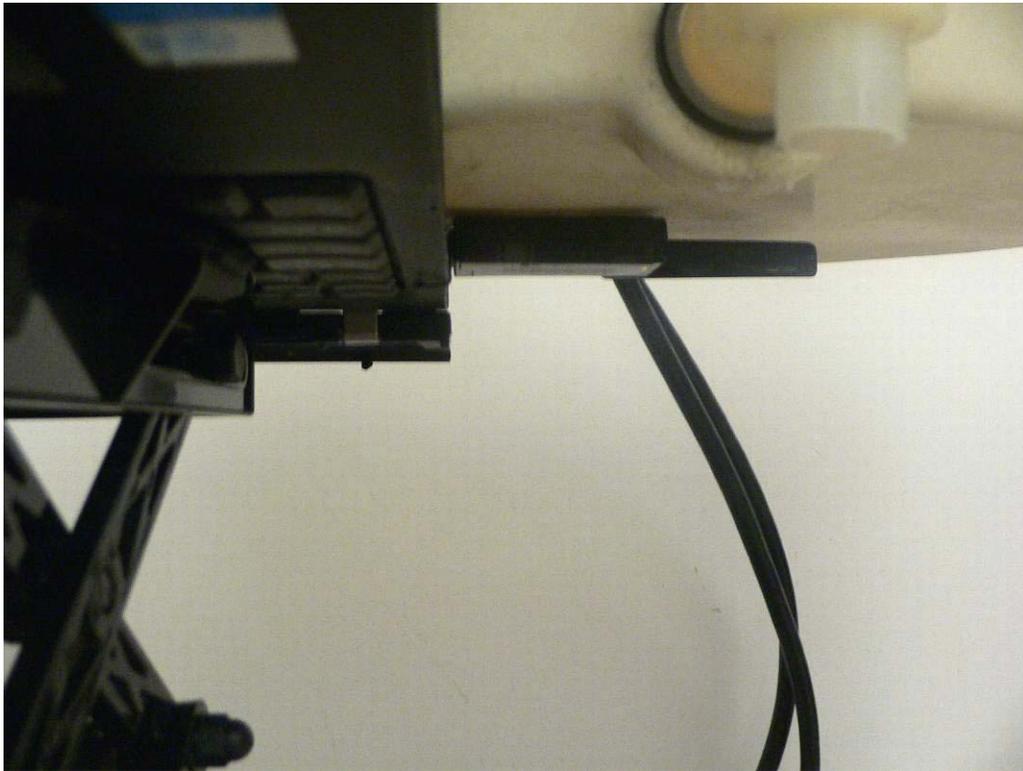
EUT with antenna parallel back touch to the flat phantom with Dell laptop (Inspiron 1300)



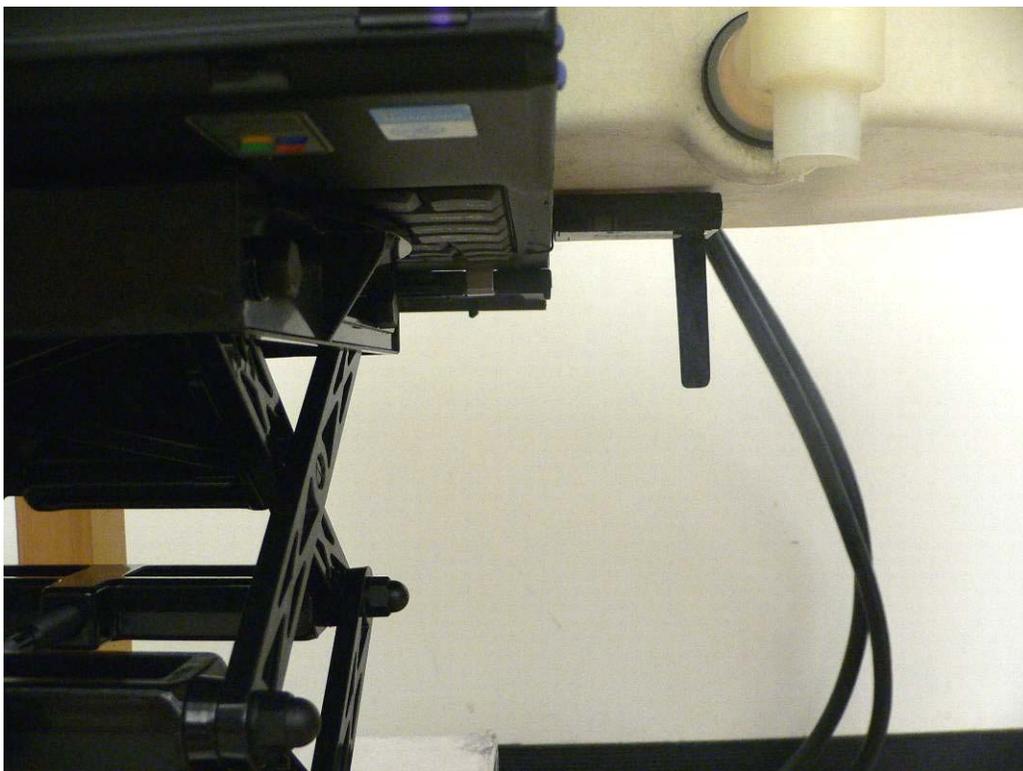
EUT with antenna perpendicular back touch to the flat phantom with Dell laptop (Inspiron 1300)



EUT with antenna parallel back touch to the flat phantom with IBM laptop (ThinkPad T40)



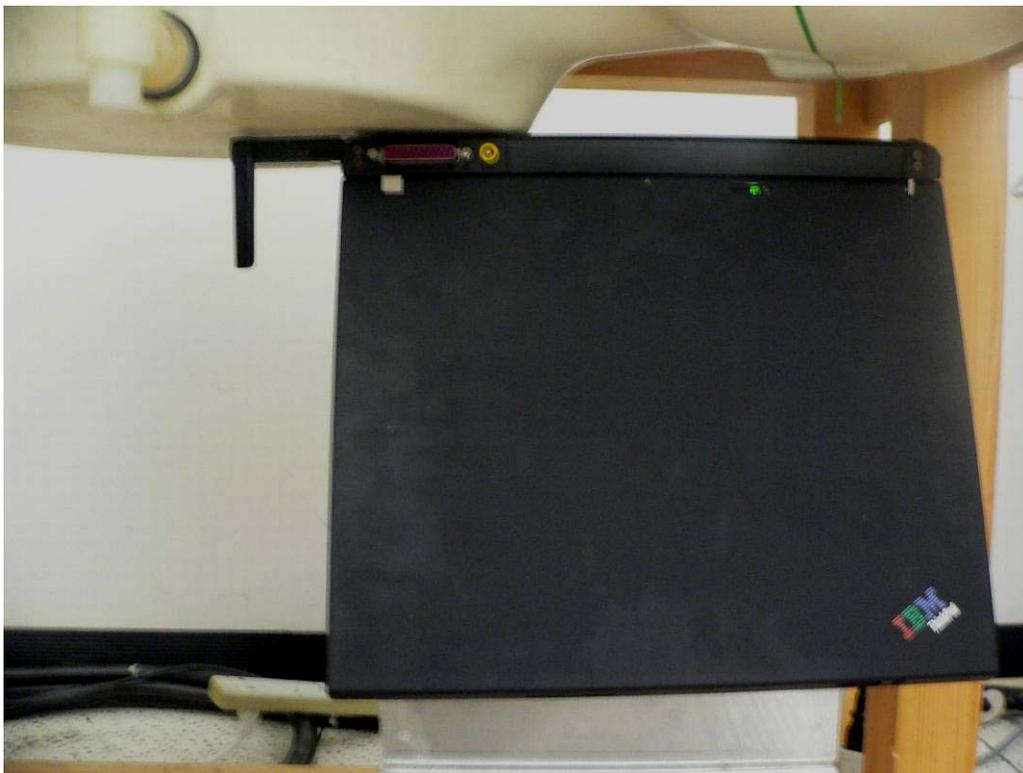
EUT with antenna perpendicular back touch to the flat phantom with IBM laptop (ThinkPad T40)



EUT with antenna parallel back touch to the flat phantom with IBM laptop (ThinkPad T40)



EUT with antenna perpendicular back touch to the flat phantom with IBM laptop (ThinkPad T40)



APPENDIX I – EUT & ACCESSORIES PHOTOS

EUT - Top View



EUT – Back View



APPENDIX J - INFORMATIVE REFERENCES

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***** END OF REPORT *****