

Applicant	Kyocera
FCC ID:	OVF-K33BIC06
Report #:	CT-K33BIC-06 C2PC-9A-0111-R0

# EXHIBIT 9 APPENDIX A: SAR VALIDATION PLOTS

# Validation for HEAD



Applicant	Kyocera
FCC ID:	OVF-K33BIC06
Report #:	CT-K33BIC-06 C2PC-9A-0111-R0

Date: 01/12/2011

#### 835MHz Validation @ 20dbm, Probe #1618, DAE#530, Dipole #4d019

Communication System: CDMA, Frequency: 835 MHz, Duty Cycle: 1:1 Medium: Head 835 MHz,Medium parameters used: f = 835 MHz;  $\sigma$  = 0.91 mho/m;  $\epsilon_r$  = 41.3;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom: SAM 12,Phantom section: Flat Section

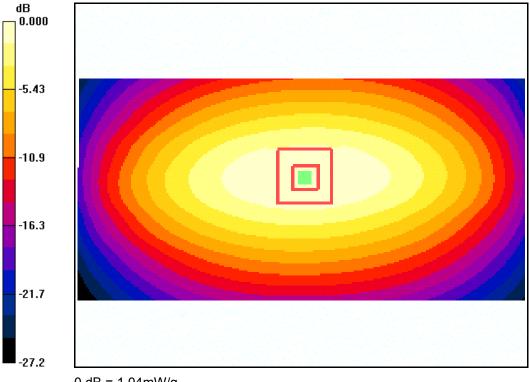
## **DASY4** Configuration:

Probe: ET3DV6 - SN1618, ConvF(6.52, 6.52, 6.52), Calibrated: 8/11/2010 Sensor-Surface: 4mm (Mechanical Surface Detection), Electronics: DAE4 Sn530,Calibrated: 4/23/2010 Measurement SW: DASY4, V4.7 Build 80 Postprocessing SW: SEMCAD, V1.8 Build 186 **Temperature:** Room T = 21.8 +/- 1 deg C, Liguid T = 22.0 +/- 1 deg C

**835MHz Validation/Area Scan (61x121x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 1.04 mW/g

835MHz Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

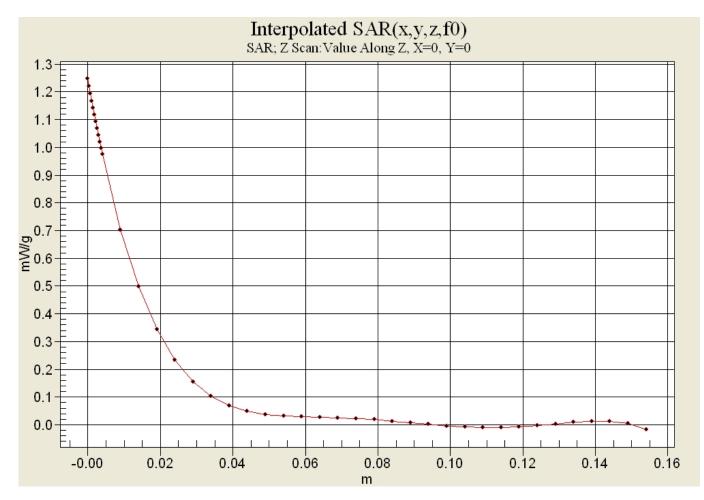
Reference Value = 33.9 V/m; Power Drift = 0.057 dB Peak SAR (extrapolated) = 1.42 W/kg SAR(1 g) = 0.965 mW/g; SAR(10 g) = 0.630 mW/g Maximum value of SAR (measured) = 1.04 mW/g





ApplicantKyoceraFCC ID:OVF-K33BIC06Report #:CT-K33BIC-06 C2PC-9A-0111-R0

Date: 01/12/2011





Applicant	Kyocera
FCC ID:	OVF-K33BIC06
Report #:	CT-K33BIC-06 C2PC-9A-0111-R0

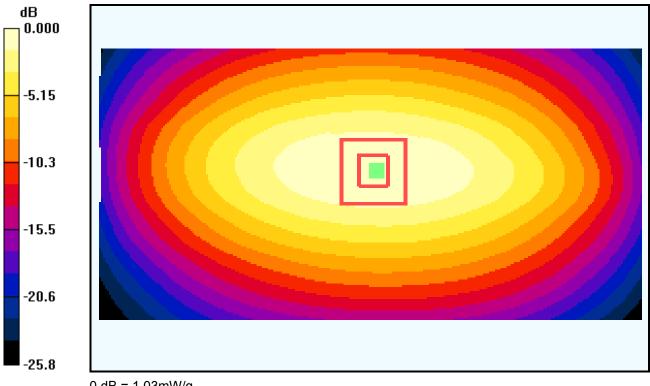
Date: 01/13/2011

835MHz Validation @ 20dbm, Probe #1618, DAE#530, Dipole #4d019

Communication System: CDMA, Frequency: 835 MHz, Duty Cycle: 1:1 Medium: Head 835 MHz, Medium parameters used: f = 835 MHz;  $\sigma$  = 0.9 mho/m;  $\epsilon_r$  = 40.5;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom: SAM 12, Phantom section: Flat Section **DASY4** Configuration: Probe: ET3DV6 - SN1618, ConvF(6.52, 6.52, 6.52), Calibrated: 8/11/2010 Sensor-Surface: 4mm (Mechanical Surface Detection), Electronics: DAE4 Sn530, Calibrated: 4/23/2010 Measurement SW: DASY4, V4.7 Build 80 Postprocessing SW: SEMCAD, V1.8 Build 186 Temperature:Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

835MHz Validation/Area Scan (61x121x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 1.02 mW/g

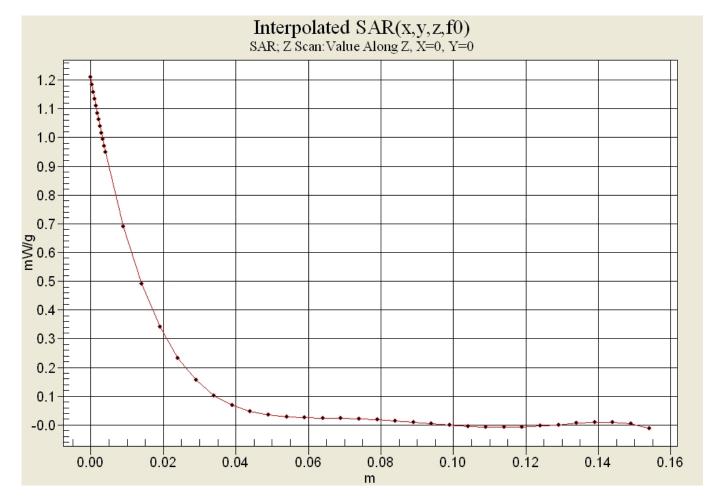
835MHz Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 34.5 V/m; Power Drift = -0.156 dB Peak SAR (extrapolated) = 1.39 W/kg SAR(1 g) = 0.951 mW/g; SAR(10 g) = 0.622 mW/g Maximum value of SAR (measured) = 1.03 mW/g





Test Laboratory: Comptest/Kyocera

Date: 01/13/2011





Applicant	Kyocera
FCC ID:	OVF-K33BIC06
Report #:	CT-K33BIC-06 C2PC-9A-0111-R0

### Date: 01/14/2011

## 1800MHz Validation, Probe #3078, DAE #602, Dipole #220

Communication System: CW 1800Mhz, Frequency: 1800 MHz, Duty Cycle: 1:1 Medium: H1800, Medium parameters used: f = 1800 MHz;  $\sigma$  = 1.4 mho/m;  $\epsilon_r$  = 39;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom: SAM 12, Phantom section: Flat Section

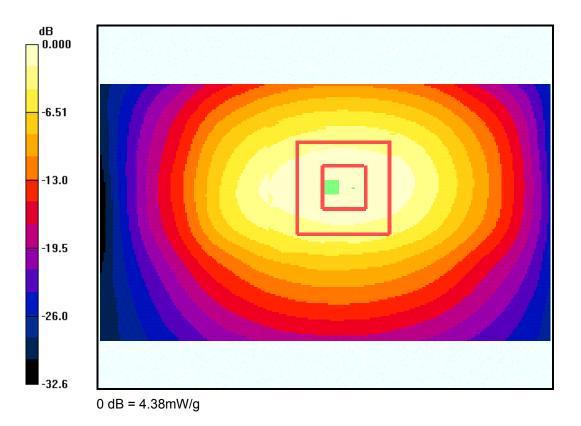
## **DASY4** Configuration:

Probe: ES3DV3 - SN3078, ConvF(4.97, 4.97, 4.97), Calibrated: 7/14/2010 Sensor-Surface: 4mm (Mechanical Surface Detection), Electronics: DAE4 Sn602, Calibrated: 7/14/2010 Measurement SW: DASY4, V4.7 Build 80 Postprocessing SW: SEMCAD, V1.8 Build 186 **Temperature:** Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

1800Mhz/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 4.74 mW/g

1800Mhz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 57.2 V/m; Power Drift = -0.014 dB Peak SAR (extrapolated) = 7.37 W/kg SAR(1 g) = 3.9 mW/g; SAR(10 g) = 2 mW/g

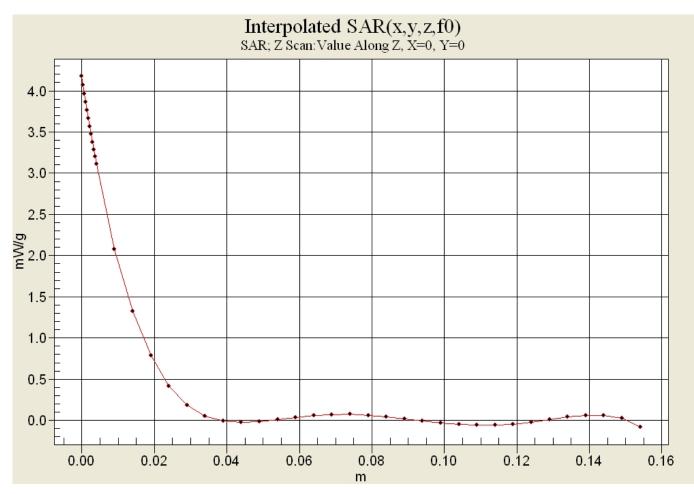
Maximum value of SAR (measured) = 4.38 mW/g





ApplicantKyoceraFCC ID:OVF-K33BIC06Report #:CT-K33BIC-06 C2PC-9A-0111-R0

Date: 01/14/2011





Applicant	Kyocera
FCC ID:	OVF-K33BIC06
Report #:	CT-K33BIC-06 C2PC-9A-0111-R0

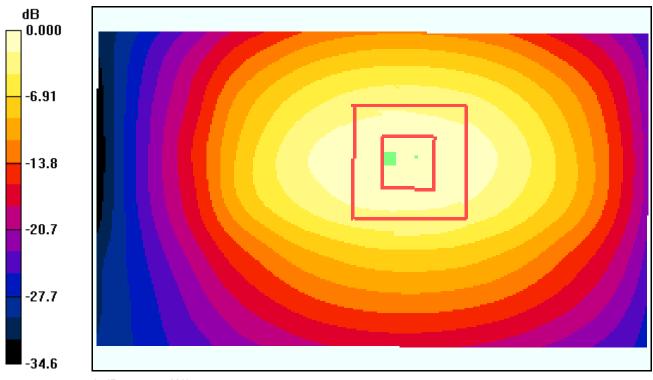
Date: 01/17/2011

# 1800MHz Validation, Probe #3078, DAE #602, Dipole #220

Communication System: CW 1800Mhz, Frequency: 1800 MHz, Duty Cycle: 1:1 Medium: H1800,Medium parameters used: f = 1800 MHz;  $\sigma$  = 1.44 mho/m;  $\epsilon_r$  = 38.8;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom: SAM 12,Phantom section: Flat Section **DASY4 Configuration:** Probe: ES3DV3 - SN3078, ConvF(4.97, 4.97, 4.97), Calibrated: 7/14/2010 Sensor-Surface: 4mm (Mechanical Surface Detection), Electronics: DAE4 Sn602,Calibrated: 7/14/2010 Measurement SW: DASY4, V4.7 Build 80 Postprocessing SW: SEMCAD, V1.8 Build 186 **Temperature:**Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**1800Mhz/Area Scan (41x71x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 4.66 mW/g

1800Mhz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 56.3 V/m; Power Drift = -0.126 dB Peak SAR (extrapolated) = 7.40 W/kg SAR(1 g) = 3.94 mW/g; SAR(10 g) = 2.03 mW/g Maximum value of SAR (measured) = 4.44 mW/g

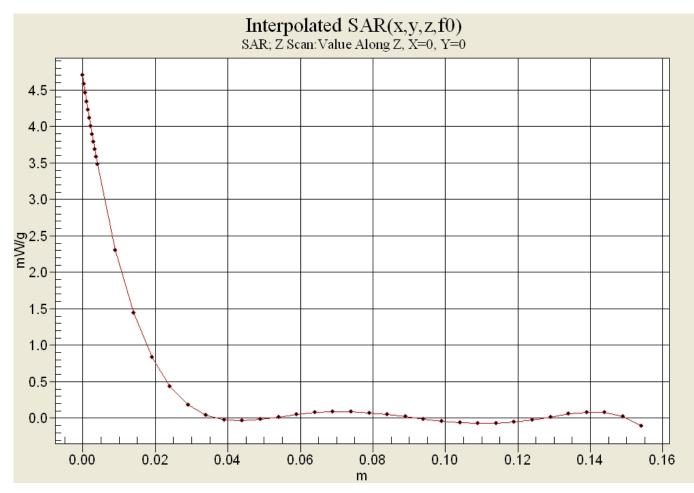


 $<sup>0 \,</sup> dB = 4.44 \, mW/g$ 



Applicant	Kyocera
FCC ID:	OVF-K33BIC06
Report #:	CT-K33BIC-06 C2PC-9A-0111-R0

Date: 01/17/2011





Applicant	Kyocera
FCC ID:	OVF-K33BIC06
Report #:	CT-K33BIC-06 C2PC-9A-0111-R0

Date: 01/13/2011

### 1900Mhz Validation @ 20dBm Probe 3035, DAE 675 and Dipole 5d016

Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1 Medium: HSL1900, Medium parameters used (interpolated): f = 1900 MHz;  $\sigma = 1.45$  mho/m;  $\epsilon_r = 39.3$ ;  $\rho = 1000$ kg/m<sup>3</sup>

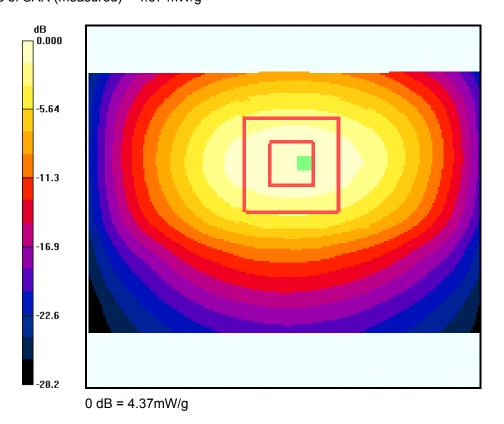
Phantom: SAM 12, Phantom section: Flat Section

## **DASY4** Configuration:

Probe: ES3DV3 - SN3035, ConvF(5, 5, 5), Calibrated: 9/9/2010 Sensor-Surface: 4mm (Mechanical Surface Detection), Electronics: DAE4 Sn675, Calibrated: 4/21/2010 Measurement SW: DASY4, V4.7 Build 80 Postprocessing SW: SEMCAD, V1.8 Build 186 **Temperature:** Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

1900MHz Validation @20dBm/Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 4.84 mW/g

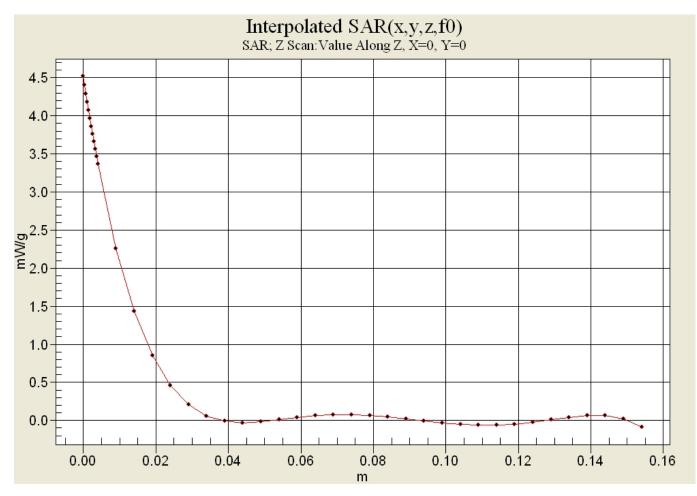
1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 42.9 V/m; Power Drift = 0.013 dB Peak SAR (extrapolated) = 7.17 W/kg SAR(1 g) = 3.92 mW/g; SAR(10 g) = 2.03 mW/g Maximum value of SAR (measured) = 4.37 mW/g





## Test Laboratory: Comptest/Kyocera

Date: 01/13/2011





Applicant	Kyocera
FCC ID:	OVF-K33BIC06
Report #:	CT-K33BIC-06 C2PC-9A-0111-R0

# Validation for BODY



Applicant	Kyocera
FCC ID:	OVF-K33BIC06
Report #:	CT-K33BIC-06 C2PC-9A-0111-R0

Date: 01/19/2011

#### 835MHz Validation (in Muscle), Probe #3078, DAE #602, Dipole #4d019

Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1 Medium: M900,Medium parameters used: f = 835 MHz;  $\sigma$  = 0.94 mho/m;  $\epsilon_r$  = 54.6;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom: SAM 12,Phantom section: Flat Section

## **DASY4** Configuration:

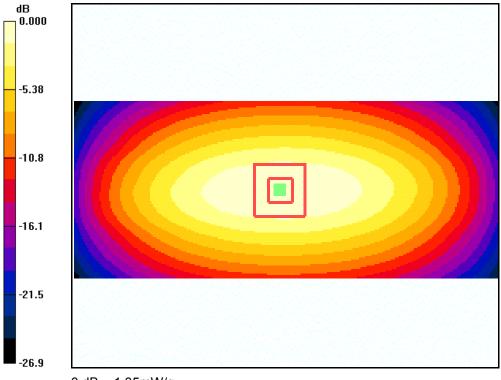
Probe: ES3DV3 - SN3078, ConvF(5.82, 5.82, 5.82), Calibrated: 7/14/2010 Sensor-Surface: 4mm (Mechanical Surface Detection), Electronics: DAE4 Sn602, Calibrated: 7/14/2010 Measurement SW: DASY4, V4.7 Build 80 Postprocessing SW: SEMCAD, V1.8 Build 186 **Temperature:** Room T = 21.8 1 deg C, Liquid T = 22.0 1 deg C

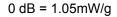
**835MHz/Area Scan (51x121x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 1.03 mW/g

**835MHz/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 33.3 V/m; Power Drift = 0.000 dB

Peak SAR (extrapolated) = 1.42 W/kg SAR(1 g) = 0.966 mW/g; SAR(10 g) = 0.638 mW/g

Maximum value of SAR (measured) = 1.05 mW/g

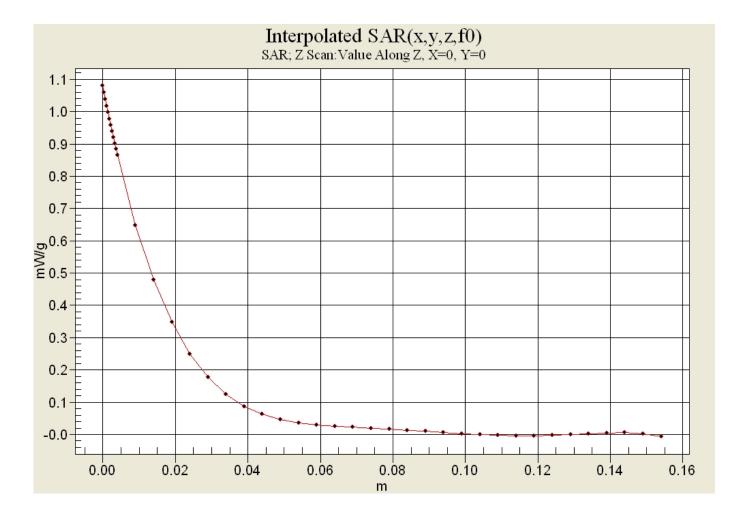






ApplicantKyoceraFCC ID:OVF-K33BIC06Report #:CT-K33BIC-06 C2PC-9A-0111-R0

Date: 01/19/2011





Test Laboratory: Comptest/Kyocera

#### Date: 01/19/2011

# 1800MHz Validation (in Muscle), Probe #3078, DAE #602, Dipole #220

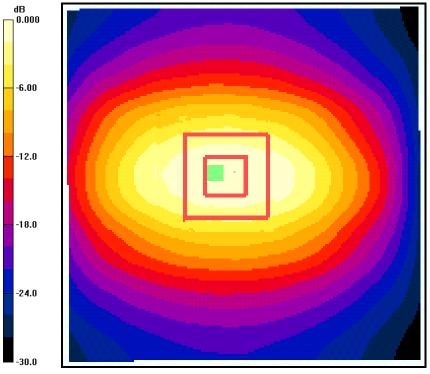
Communication System: CW 1800Mhz, Frequency: 1800 MHz, Duty Cycle: 1:1 Medium: M1800,Medium parameters used: f = 1800 MHz;  $\sigma$  = 1.56 mho/m;  $\epsilon_r$  = 51.4;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom: SAM 12,Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: ES3DV3 - SN3078, ConvF(4.73, 4.73, 4.73), Calibrated: 7/14/2010 Sensor-Surface: 4mm (Mechanical Surface Detection), Electronics: DAE4 Sn602, Calibrated: 7/14/2010 Measurement SW: DASY4, V4.7 Build 80 Postprocessing SW: SEMCAD, V1.8 Build 186 **Temperature:** Room T = 21.8 1 deg C, Liquid T = 22.0 1 deg C

**1800Mhz/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 4.92 mW/g

1800Mhz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 52.5 V/m; Power Drift = 0.099 dB Peak SAR (extrapolated) = 6.96 W/kg SAR(1 g) = 3.87 mW/g; SAR(10 g) = 2.02 mW/g Maximum value of SAR (measured) = 4.34 mW/g

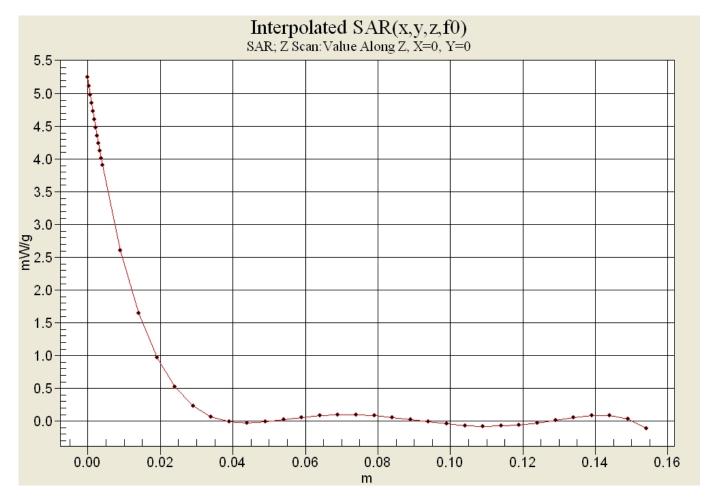


 $0 \, dB = 4.34 \, mW/g$ 



Test Laboratory: Comptest/Kyocera

Date: 01/19/2011





Applicant	Kyocera
FCC ID:	OVF-K33BIC06
Report #:	CT-K33BIC-06 C2PC-9A-0111-R0

### Date: 01/18/2011

### 1900MHz Validation (in Muscle), Probe #3078, DAE #602, Dipole #5d016

Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1 Medium: M1900,Medium parameters used (interpolated): f = 1900 MHz;  $\sigma$  = 1.54 mho/m;  $\epsilon_r$  = 52;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom: SAM 12,Phantom section: Flat Section

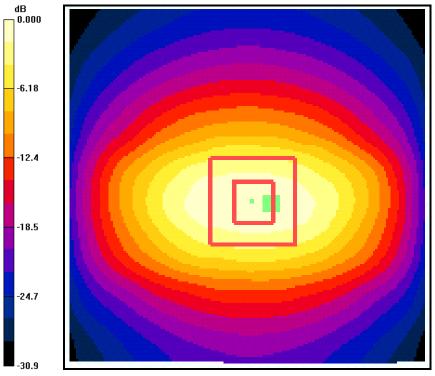
## **DASY4 Configuration:**

Probe: ES3DV3 - SN3078, ConvF(4.5, 4.5, 4.5), Calibrated: 7/14/2010 Sensor-Surface: 4mm (Mechanical Surface Detection), Electronics: DAE4 Sn602,Calibrated: 7/14/2010 Measurement SW: DASY4, V4.7 Build 80 Postprocessing SW: SEMCAD, V1.8 Build 186 **Temperature:** Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

**1900MHz Validation @20dBm/Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 4.98 mW/g

**1900MHz Validation** @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 53.5 V/m; Power Drift = -0.157 dB Peak SAR (extrapolated) = 7.05 W/kg

SAR(1 g) = 4.05 mW/g; SAR(10 g) = 2.12 mW/g Maximum value of SAR (measured) = 4.67 mW/g



 $0 \, dB = 4.67 \, mW/g$ 



Test Laboratory: Comptest/Kyocera

Date: 01/18/2011

