

Applicant:	Kyocera
FCC ID:	V65C5171
Report #:	CT-C5171-9A-0712-R0

EXHIBIT 9 APPENDIX A: SAR VALIDATION PLOTS

Validation for HEAD



Applicant:	Kyocera
FCC ID:	V65C5171
Report #:	CT-C5171-9A-0712-R0

Test Laboratory: Comptest/Kyocera Date: 07/20/2012

835MHz Validation, Probe #3035, DAE #530, Dipole #467

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

Medium: Head 835 MHz, Medium parameters used (interpolated): f = 835 MHz; $\sigma = 0.92$ mho/m; $\epsilon_r = 43.2$; $\rho = 1000$

kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ES3DV3 - SN3035, ConvF(6.04, 6.04, 6.04), Calibrated: 2/22/2012

Sensor-Surface: 4mm (Mechanical Surface Detection),

Electronics: DAE4 Sn530, Calibrated: 5/30/2012 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

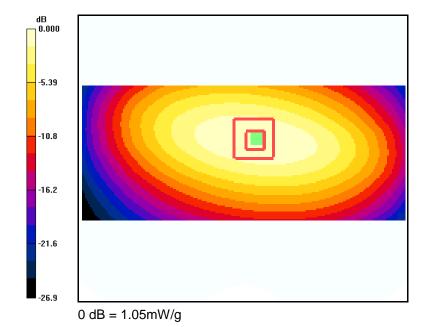
Maximum value of SAR (interpolated) = 1.05 mW/g

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

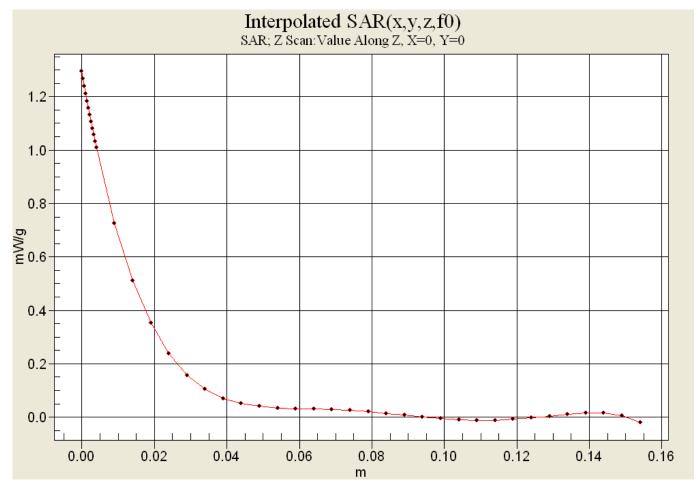
Reference Value = 32.9 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 1.47 W/kg

SAR(1 g) = 0.980 mW/g; SAR(10 g) = 0.639 mW/g Maximum value of SAR (measured) = 1.07 mW/g









Applicant:	Kyocera
FCC ID:	V65C5171
Report #:	CT-C5171-9A-0712-R0

Test Laboratory: Comptest/Kyocera Date: 07/23/2012

1800Mhz Validation @ 20dBm Probe 1618, DAE 603 and Dipole 220

Communication System: CW, Frequency: 1800 MHz, Duty Cycle: 1:1

Medium: HSL1800, Medium parameters used (extrapolated): f = 1800 MHz; $\sigma = 1.45 \text{ mho/m}$; $\epsilon_r = 38.3$; $\rho = 1000 \text{ mHz}$

kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1618, ConvF(5.29, 5.29, 5.29), Calibrated: 9/19/2011

Sensor-Surface: 4mm (Mechanical Surface Detection),

Electronics: DAE4 Sn603, Calibrated: 9/27/2011 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 Validation @20dBm/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 4.55 mW/g

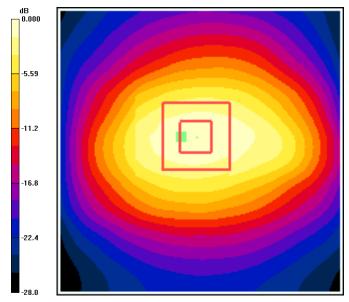
1800MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 55.0 V/m; Power Drift = 0.124 dB

Peak SAR (extrapolated) = 6.90 W/kg

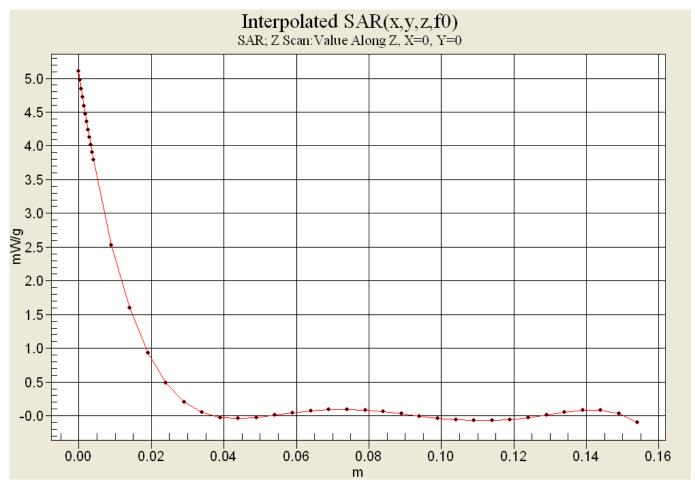
SAR(1 g) = 3.92 mW/g; SAR(10 g) = 2.09 mW/g

Maximum value of SAR (measured) = 4.46 mW/g



0 dB = 4.55 mW/g







Applicant:	Kyocera
FCC ID:	V65C5171
Report #:	CT-C5171-9A-0712-R0

Test Laboratory: Comptest/Kyocera Date: 07/19/2012

1900Mhz Validation @ 20dBm Probe 1618, DAE 603 and Dipole 5d016

Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1

Medium: HSL1900, Medium parameters used (interpolated): f = 1900 MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$

kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1618, ConvF(5.04, 5.04, 5.04), Calibrated: 9/19/2011

Sensor-Surface: 4mm (Mechanical Surface Detection),

Electronics: DAE4 Sn603, Calibrated: 9/27/2011 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) = 4.70 mW/g

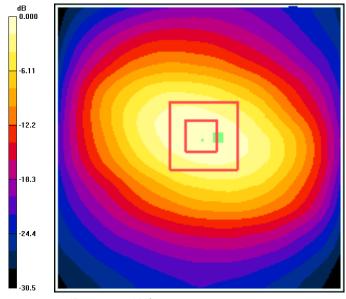
1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.8 V/m; Power Drift = -0.179 dB

Peak SAR (extrapolated) = 7.07 W/kg

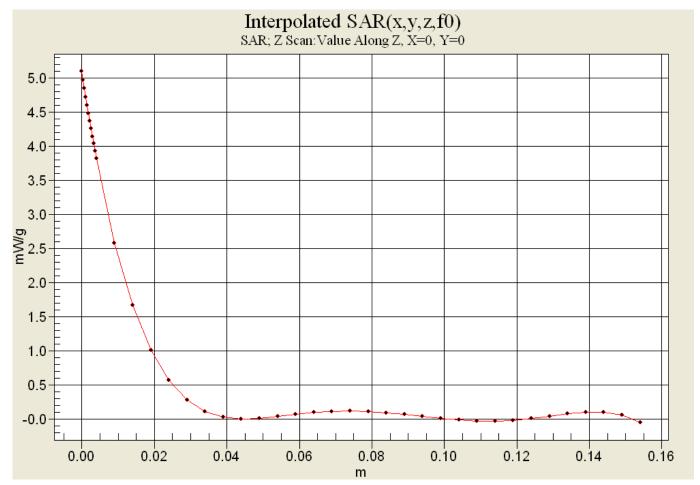
SAR(1 g) = 4.02 mW/g; SAR(10 g) = 2.12 mW/g

Maximum value of SAR (measured) = 4.54 mW/g



0 dB = 4.70 mW/g







Applicant:	Kyocera
FCC ID:	V65C5171
Report #:	CT-C5171-9A-0712-R0

Test Laboratory: Comptest/Kyocera Date: 08/07/2012

2450MHz Validation, Probe #3078, DAE #675, Dipole #776

Communication System: CW, Frequency: 2450 MHz, Duty Cycle: 1:1

Medium: HSL2450, Medium parameters used: f = 2450 MHz; $\sigma = 1.87 \text{ mho/m}$; $\varepsilon_r = 38.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ES3DV3 - SN3078, ConvF(4.44, 4.44, 4.44), Calibrated: 7/19/2012

Sensor-Surface: 4mm (Mechanical Surface Detection),

Electronics: DAE4 Sn675, Calibrated: 5/23/2012 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

2450MHz Validation @20dBm/Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 6.65 mW/g

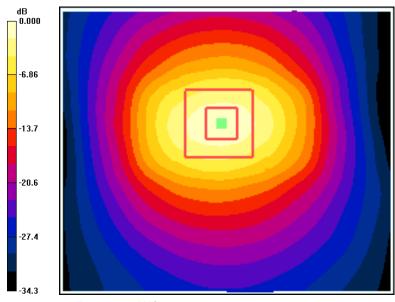
2450MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 45.2 V/m; Power Drift = 0.179 dB

Peak SAR (extrapolated) = 11.1 W/kg

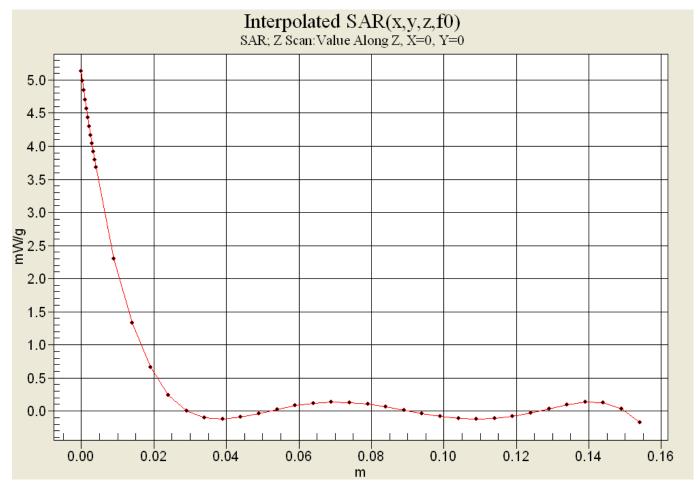
SAR(1 g) = 5.11 mW/g; SAR(10 g) = 2.3 mW/g

Maximum value of SAR (measured) = 5.81 mW/g



0 dB = 6.65 mW/g







Applicant:	Kyocera
FCC ID:	V65C5171
Report #:	CT-C5171-9A-0712-R0

Test Laboratory: Comptest/Kyocera Date: 09/13/2012

2450MHz Validation, Probe #3078, DAE #675, Dipole #776

Communication System: CW, Frequency: 2450 MHz, Duty Cycle: 1:1

Medium: HSL2450, Medium parameters used: f = 2450 MHz; $\sigma = 1.82 \text{ mho/m}$; $\epsilon_r = 38.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ES3DV3 - SN3078, ConvF(4.44, 4.44, 4.44), Calibrated: 7/19/2012

Sensor-Surface: 4mm (Mechanical Surface Detection),

Electronics: DAE4 Sn675, Calibrated: 5/23/2012 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

2450MHz Validation @20dBm/Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm

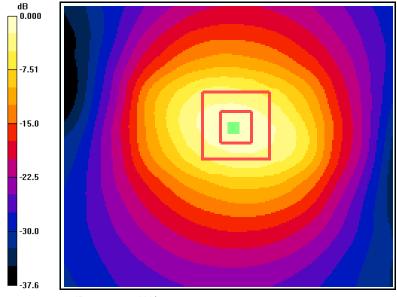
Maximum value of SAR (interpolated) = 6.74 mW/g

2450MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.1 V/m; Power Drift = 0.018 dB

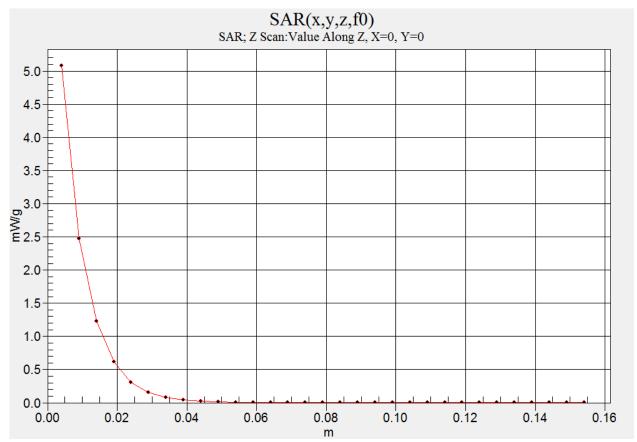
Peak SAR (extrapolated) = 11.2 W/kg

SAR(1 g) = 5.23 mW/g; SAR(10 g) = 2.37 mW/gMaximum value of SAR (measured) = 6.00 mW/g



0 dB = 6.74 mW/g







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Validation for BODY



Applicant:	Kyocera
FCC ID:	V65C5171
Report #:	CT-C5171-9A-0712-R0

Test Laboratory: Comptest/Kyocera Date: 08/09/2012

835MHz Validation(Muscle), Probe #3036, DAE #603, Dipole #5d016

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

Medium: M800, Medium parameters used: f = 835 MHz; σ = 0.94 mho/m; ε_r = 54.7; ρ = 1000 kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ES3DV3 - SN3036, ConvF(5.83, 5.83, 5.83), Calibrated: 5/29/2012

Sensor-Surface: 4mm (Mechanical Surface Detection),

Electronics: DAE4 Sn603, Calibrated: 9/27/2011 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 @20dBm/Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm

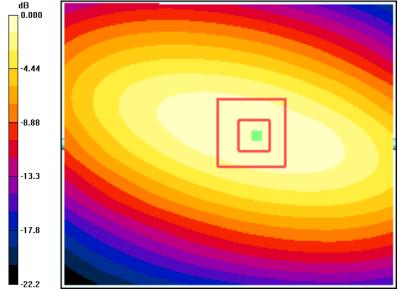
Maximum value of SAR (interpolated) = 1.08 mW/g

835MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.5 V/m; Power Drift = 0.144 dB

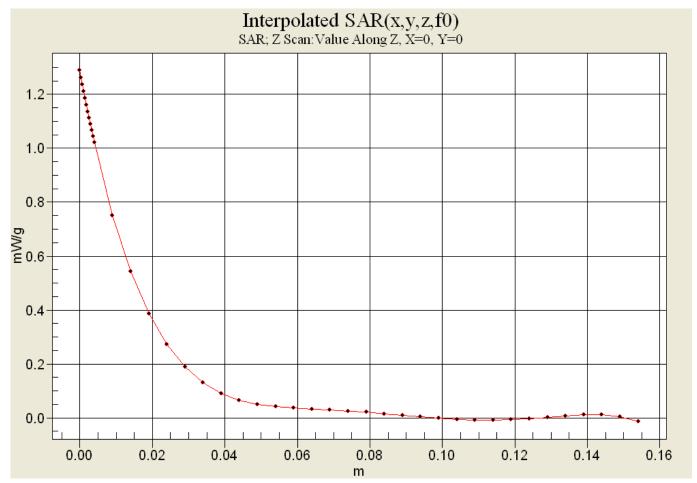
Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 1 mW/g; SAR(10 g) = 0.663 mW/g Maximum value of SAR (measured) = 1.09 mW/g



0 dB = 1.08 mW/g







Applicant:	Kyocera
FCC ID:	V65C5171
Report #:	CT-C5171-9A-0712-R0

Test Laboratory: Comptest/Kyocera Date: 08/06/2012

1800MHz Validation(Muscle), Probe #1618, DAE #603, Dipole #5d016

Communication System: CW, Frequency: 1800 MHz, Duty Cycle: 1:1

Medium: M1800, Medium parameters used: f = 1800 MHz; $\sigma = 1.57 \text{ mho/m}$; $\varepsilon_r = 51.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1618, ConvF(4.68, 4.68, 4.68), Calibrated: 9/19/2011

Sensor-Surface: 4mm (Mechanical Surface Detection),

Electronics: DAE4 Sn603, Calibrated: 9/27/2011 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 Validation @20dBm/Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm

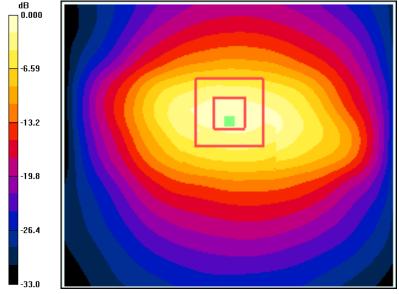
Maximum value of SAR (interpolated) = 5.88 mW/g

1800MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 47.0 V/m; Power Drift = 0.169 dB

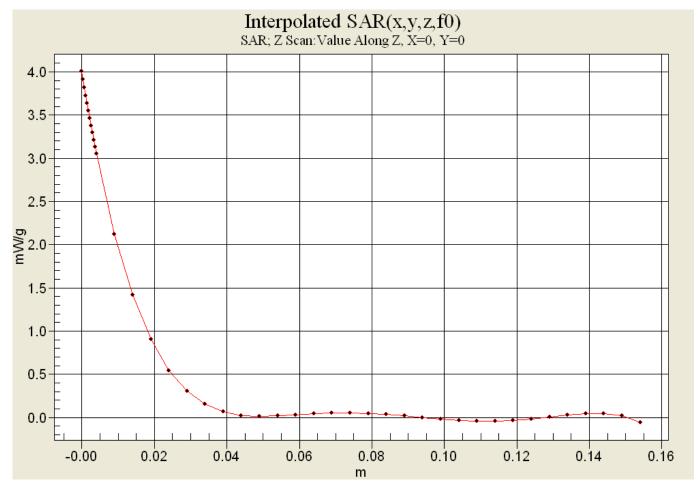
Peak SAR (extrapolated) = 6.73 W/kg

SAR(1 g) = 4.09 mW/g; SAR(10 g) = 2.21 mW/g Maximum value of SAR (measured) = 4.50 mW/g



0 dB = 5.88 mW/g







Applicant:	Kyocera
FCC ID:	V65C5171
Report #:	CT-C5171-9A-0712-R0

Test Laboratory: Comptest/Kyocera Date: 07/24/2012

1900Mhz Validation (Muscle) @ 20dBm Probe 1618, DAE 603 and Dipole 5d016

Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1

Medium: M1800, Medium parameters used (interpolated): f = 1900 MHz; $\sigma = 1.51 \text{ mho/m}$; $\varepsilon_r = 51.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1618, ConvF(4.44, 4.44, 4.44), Calibrated: 9/19/2011

Sensor-Surface: 4mm (Mechanical Surface Detection),

Electronics: DAE4 Sn603, Calibrated: 9/27/2011 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

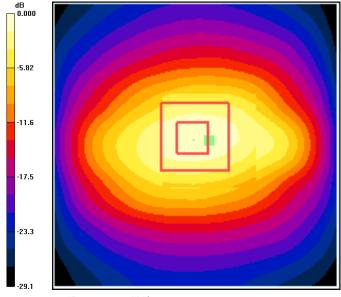
Maximum value of SAR (interpolated) = 4.69 mW/g

1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 58.7 V/m; Power Drift = 0.155 dB

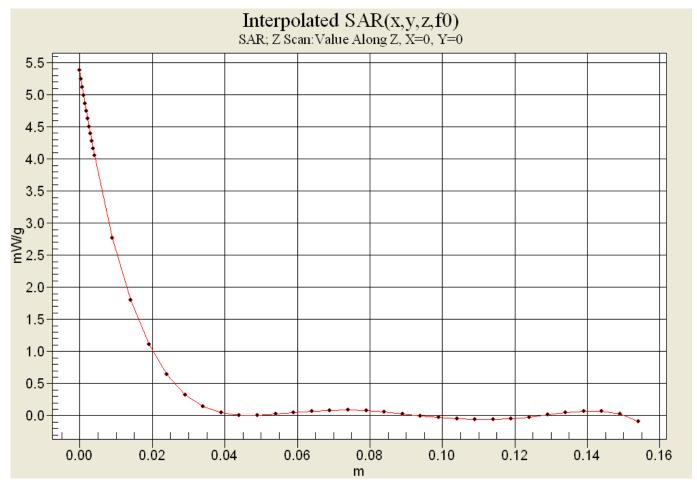
Peak SAR (extrapolated) = 6.75 W/kg

SAR(1 g) = 3.97 mW/g; SAR(10 g) = 2.13 mW/g Maximum value of SAR (measured) = 4.52 mW/g



0 dB = 4.69 mW/g







Applicant:	Kyocera
FCC ID:	V65C5171
Report #:	CT-C5171-9A-0712-R0

Test Laboratory: Comptest/Kyocera Date: 07/25/2012

1900MHz Validation(Muscle), Probe #1618, DAE #603, Dipole #5d016

Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1

Medium: M1900, Medium parameters used (interpolated): f = 1900 MHz; $\sigma = 1.53 \text{ mho/m}$; $\epsilon_r = 51.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1618, ConvF(4.44, 4.44, 4.44), Calibrated: 9/19/2011

Sensor-Surface: 4mm (Mechanical Surface Detection),

Electronics: DAE4 Sn603, Calibrated: 9/27/2011 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 (61x71x1): Measurement grid: dx=15mm, dy=15mm

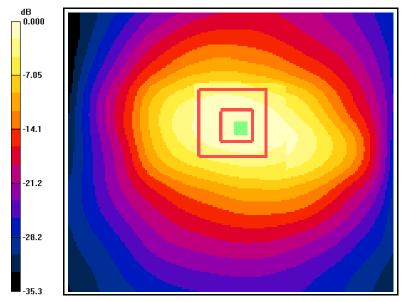
Maximum value of SAR (interpolated) = 4.92 mW/g

1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 49.9 V/m; Power Drift = -0.157 dB

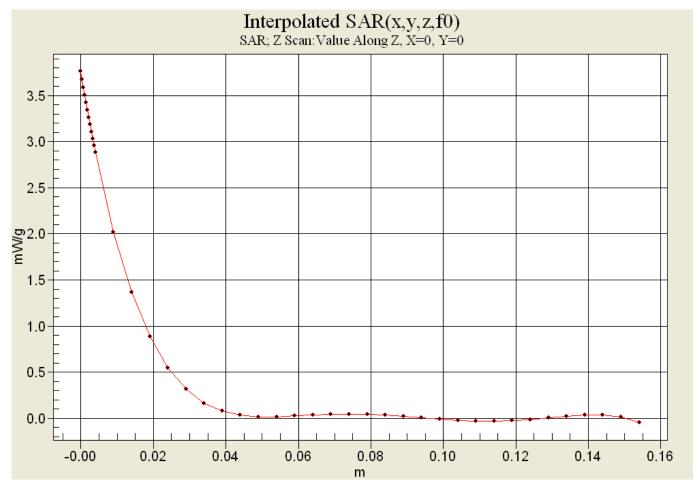
Peak SAR (extrapolated) = 7.36 W/kg

SAR(1 g) = 4.3 mW/g; SAR(10 g) = 2.3 mW/g Maximum value of SAR (measured) = 4.88 mW/g



0 dB = 4.92 mW/g







Applicant:	Kyocera
FCC ID:	V65C5171
Report #:	CT-C5171-9A-0712-R0

Test Laboratory: Comptest/Kyocera Date: 08/08/2012

2450MHz Validation(Muscle), Probe #3036, DAE #603, Dipole #776

Communication System: CW, Frequency: 2450 MHz, Duty Cycle: 1:1

Medium: M2450, Medium parameters used (interpolated): f = 2450 MHz; $\sigma = 1.9 \text{ mho/m}$; $\epsilon_r = 52.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ES3DV3 - SN3036, ConvF(4.09, 4.09, 4.09), Calibrated: 5/29/2012

Sensor-Surface: 4mm (Mechanical Surface Detection),

Electronics: DAE4 Sn603, Calibrated: 9/27/2011 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

2450MHz Validation @20dBm/Area Scan (61x71x1): Measurement grid: dx=15mm, dy=15mm

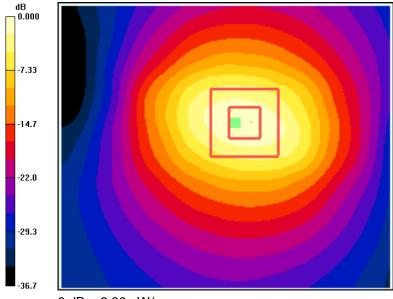
Maximum value of SAR (interpolated) = 6.00 mW/g

2450MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 39.9 V/m; Power Drift = 0.060 dB

Peak SAR (extrapolated) = 10.1 W/kg

SAR(1 g) = 4.84 mW/g; SAR(10 g) = 2.23 mW/gMaximum value of SAR (measured) = 5.49 mW/g



0 dB = 6.00 mW/g



