

RTS RIM Testing Services	Document Appendices for the BlackBerry 7130e Wireless Handheld Model RAV20CW SAR Report		Page 1(19)
Author Data Lauren Weber	Dates of Test June 20 – July 04, 2005	Test Report No RTS-0181-0507-02 rev. 01	FCC ID: L6ARAV20CW

APPENDIX C: SAR DISTRIBUTION PLOTS FOR BODY-WORN CONFIGURATION

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		FCC ID: L6ARAV20CW

Date/Time: 28/06/2005 9:58:25 AMDate/Time: 28/06/2005 10:14:03 AM

Test Laboratory: RTS

**Body_Worn_Leather_Holster_Back_Facing_Phantom_CDMA
800_Mid_ChanAmbient_Temp_24_4_celsius_Liquid_Temp_22_2_celsius**

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: CDMA 800; Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium: M 835 Medium parameters used: $f = 836.52 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_r = 52.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.18, 6.18, 6.18); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (81x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.30 mW/g

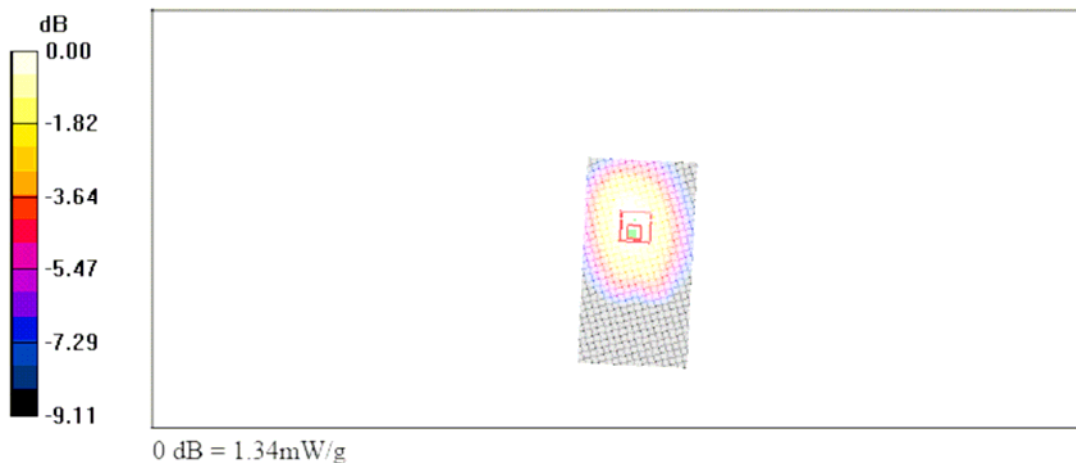
Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 39.0 V/m; Power Drift = -0.222 dB

Peak SAR (extrapolated) = 1.72 W/kg

SAR(1 g) = 1.24 mW/g; SAR(10 g) = 0.883 mW/g

Maximum value of SAR (measured) = 1.34 mW/g



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Lauren Weber	June 20 – July 04, 2005	RTS-0181-0507-02 rev. 01	L6ARAV20CW

Date/Time: 28/06/2005 6:19:31 PMDate/Time: 28/06/2005 6:35:09 PM

Test Laboratory: RTS

Body_Worn_Fabric_Holster_Back_Facing_Phantom_CDMA
800_Mid_ChanAmbient_Temp_24.7_celsius_Liquid_Temp_22_2_celsius

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: CDMA 800; Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium: M 835 Medium parameters used: $f = 836.52 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_r = 52.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.18, 6.18, 6.18); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (81x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.31 mW/g

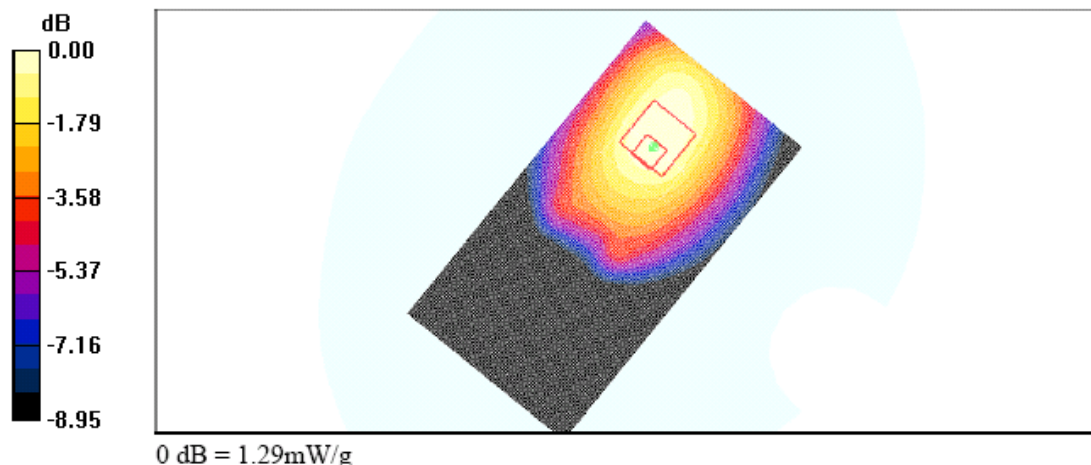
Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 31.8 V/m; Power Drift = -0.117 dB

Peak SAR (extrapolated) = 1.70 W/kg

SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.867 mW/g

Maximum value of SAR (measured) = 1.29 mW/g



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Author Data Lauren Weber	Dates of Test June 20 – July 04, 2005	Test Report No RTS-0181-0507-02 rev. 01
		FCC ID: L6ARAV20CW

Date/Time: 16/08/2005 5:00:12 PMDate/Time: 16/08/2005 5:16:02 PM

Lab: RIM Testing Services (RTS)

**Body_Worn_RedSwivel_Holster_Back_Facing_Phantom_CDMA
800_Mid_Chan_Ambient_Temp_24.0_celsius_Liquid_Temp_22.6_celsius**

DUT: BlackBerry Wireless Handheld; Type: Sample

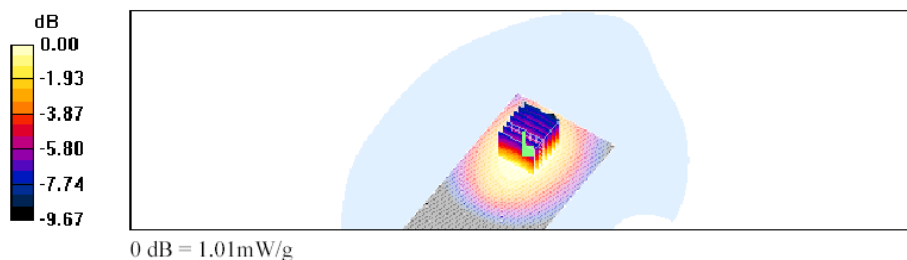
Communication System: CDMA 800; Frequency: 836.52 MHz;Duty Cycle: 1:1
Medium: M 835 Medium parameters used: $f = 836.52 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.18, 6.18, 6.18); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (81x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 1.02 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 31.6 V/m; Power Drift = 0.00 dB
Peak SAR (extrapolated) = 1.24 W/kg
SAR(1 g) = 0.939 mW/g; SAR(10 g) = 0.690 mW/g
Maximum value of SAR (measured) = 1.01 mW/g



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Author Data Lauren Weber	Dates of Test June 20 – July 04, 2005	Test Report No RTS-0181-0507-02 rev. 01	FCC ID: L6ARAV20CW

Date/Time: 28/06/2005 4:04:51 PM Date/Time: 28/06/2005 4:20:30 PM

Test Laboratory: RTS

**Body_Worn_KeyChain_Holster_Back_Facing_Phantom_CDMA
800_Mid_ChanAmbient_Temp_24.8_celsius_Liquid_Temp_22_3_celsius**

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: CDMA 800; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: M 835 Medium parameters used: $f = 836.52 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_r = 52.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.18, 6.18, 6.18); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (81x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.32 mW/g

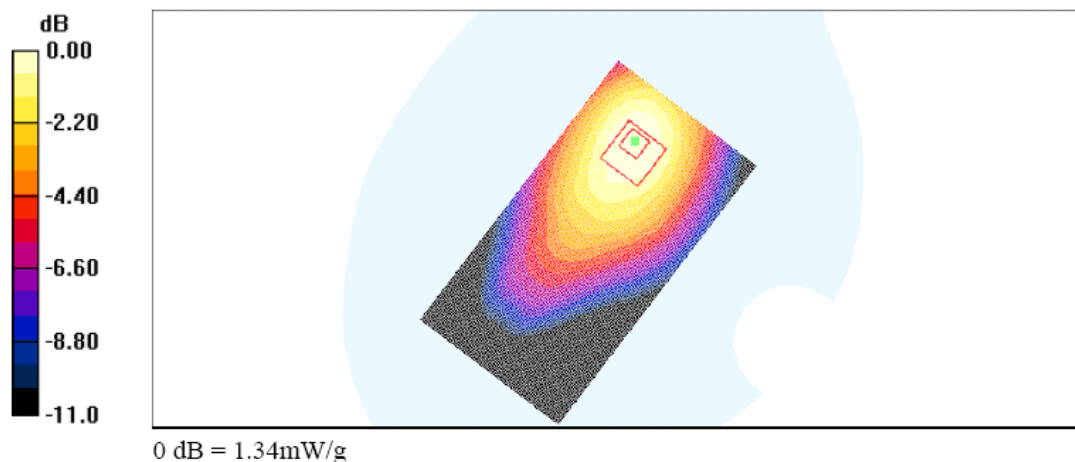
Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 32.2 V/m; Power Drift = 0.043 dB

Peak SAR (extrapolated) = 1.76 W/kg

SAR(1 g) = 1.25 mW/g; SAR(10 g) = 0.894 mW/g

Maximum value of SAR (measured) = 1.34 mW/g



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Date/Time: 28/06/2005 7:42:19 PM Date/Time: 28/06/2005 7:58:03 PM

Test Laboratory: RTS

**Body_Worn_KeyChain_Holster_Back_Facing_Phantom_CDMA
800_Mid_Chann_batt2_Ambient_Temp_24_6_celsius_Liquid_Temp_22_3_celsius**

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: CDMA 800; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: M 835 Medium parameters used: $f = 836.52 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_r = 52.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.18, 6.18, 6.18); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (81x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.09 mW/g

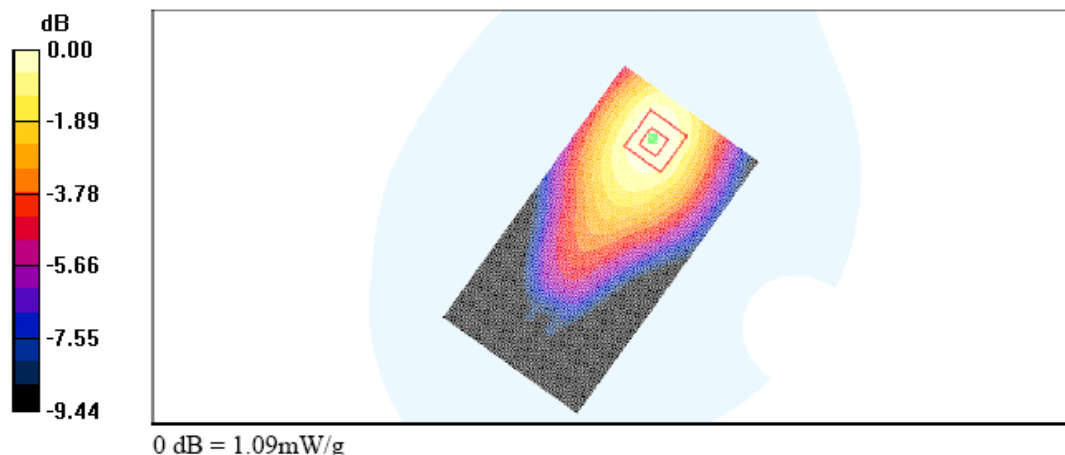
Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.4 V/m; Power Drift = -0.054 dB

Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.741 mW/g

Maximum value of SAR (measured) = 1.09 mW/g



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Date/Time: 29/06/2005 7:37:52 AM Date/Time: 29/06/2005 7:53:46 AM

Test Laboratory: RTS

**Body_Worn_KeyChain_Holster_Back_Facing_Phantom_CDMA
800_Mid_Chann_batt3_Ambient_Temp_22_3_celsius_Liquid_Temp_22_1_celsius**

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: CDMA 800; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: M 835 Medium parameters used: $f = 836.52 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_r = 52.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.18, 6.18, 6.18); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (81x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.853 mW/g

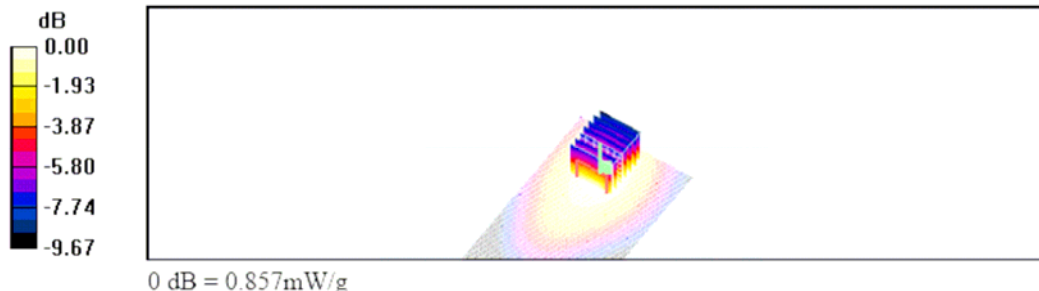
Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 27.2 V/m; Power Drift = 0.118 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.806 mW/g; SAR(10 g) = 0.583 mW/g

Maximum value of SAR (measured) = 0.857 mW/g



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Author Data Lauren Weber	Dates of Test June 20 – July 04, 2005	Test Report No RTS-0181-0507-02 rev. 01	FCC ID: L6ARAV20CW

Date/Time: 29/06/2005 8:23:38 AM Date/Time: 29/06/2005 8:39:25 AM

Test Laboratory: RTS

**Body_Worn_KeyChain_Holster_Back_Facing_Phantom_CDMA
800_Mid_Chain_batt1_Headset_Ambient_Temp_23_0_celsius_Liquid_Temp_22_2_cels**

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: CDMA 800; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: M 835 Medium parameters used: $f = 836.52 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_r = 52.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.18, 6.18, 6.18); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (81x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.01 mW/g

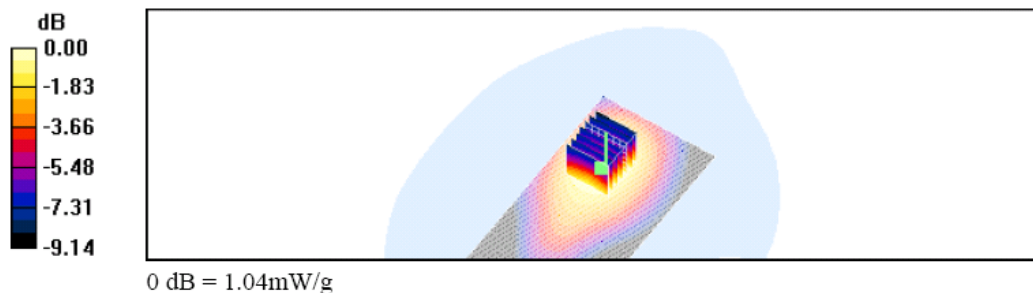
Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 26.9 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.959 mW/g; SAR(10 g) = 0.691 mW/g

Maximum value of SAR (measured) = 1.04 mW/g



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		FCC ID: L6ARAV20CW

Date/Time: 29/06/2005 2:19:25 PM Date/Time: 29/06/2005 2:35:07 PM

Test Laboratory: RTS

**Body_Worn_KeyChain_Holster_Back_Facing_Phantom_CDMA
800_Mid_Chan_batt1_BT
ON_Headset_Ambient_Temp_23_8_celsius_Liquid_Temp_22_4_celsius**

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: CDMA 800; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: M 835 Medium parameters used: $f = 836.52 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_r = 52.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.18, 6.18, 6.18); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (81x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.23 mW/g

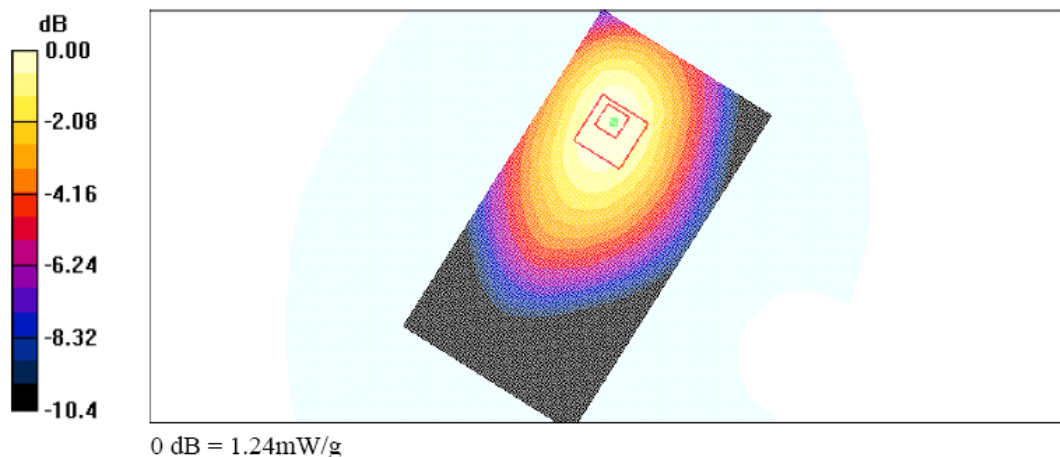
Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 28.2 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.833 mW/g

Maximum value of SAR (measured) = 1.24 mW/g



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Author Data Lauren Weber	Dates of Test June 20 – July 04, 2005	Test Report No RTS-0181-0507-02 rev. 01
		FCC ID: L6ARAV20CW

Date/Time: 30/06/2005 10:39:17 AM Date/Time: 30/06/2005 10:56:45 AM

Test Laboratory: RTS

Body_Worn_Leather_Holster_Back_Facing_Phantom_CDMA
1900_Low_ChanAmbient_Temp_24_8_celsius_Liquid_Temp_22_4_celsius

DUT: BlackBerry Wireless Handheld; Type: Sample

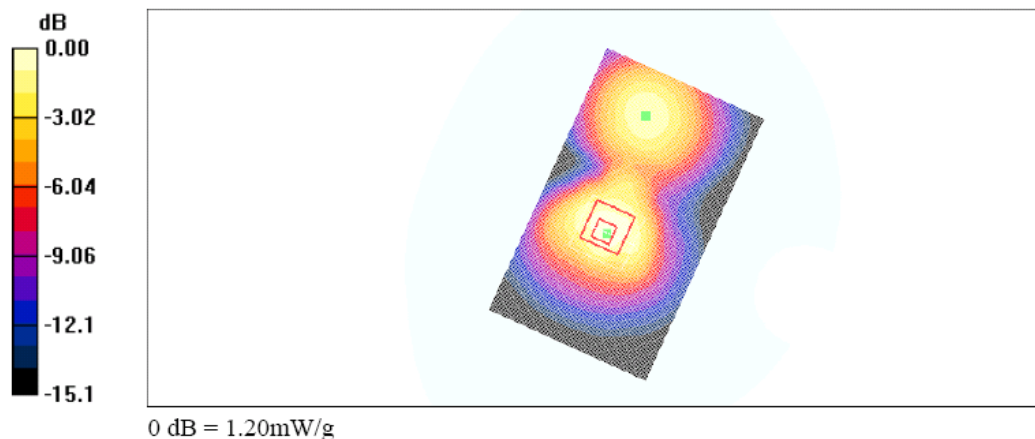
Communication System: CDMA 1900; Frequency: 1851.25 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used: $f = 1851.25 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 50.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.78, 4.78, 4.78); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (91x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 1.24 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 25.8 V/m; Power Drift = 0.202 dB
Peak SAR (extrapolated) = 1.39 W/kg
SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.714 mW/g
Maximum value of SAR (measured) = 1.20 mW/g



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Author Data Lauren Weber	Dates of Test June 20 – July 04, 2005	Test Report No RTS-0181-0507-02 rev. 01	FCC ID: L6ARAV20CW

Date/Time: 26/08/2005 11:23:08 AM Date/Time: 26/08/2005 11:40:26 AM

Lab: RIM Testing Services (RTS)

**Body_Worn_RedLeatherSwivelHolster_Back_Facing_Phantom_CDMA
1900_Mid_ChanAmbient_Temp_23_1_celsius_Liquid_Temp_22_3_celsius**

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: CDMA 1900; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: M1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.78, 4.78, 4.78); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (91x151x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.921 mW/g

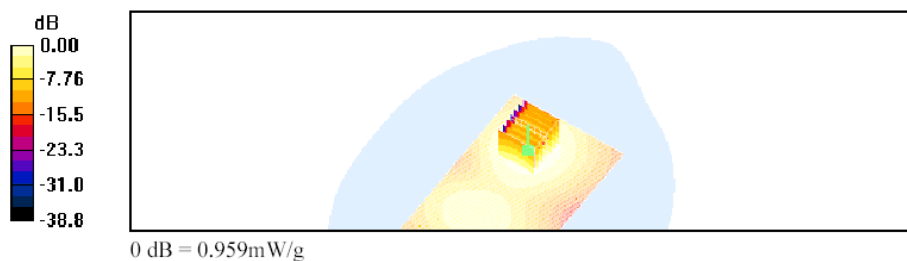
Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.0 V/m; Power Drift = -19.1 dB

Peak SAR (extrapolated) = 2.47 W/kg

SAR(1 g) = 0.992 mW/g; SAR(10 g) = 0.590 mW/g

Maximum value of SAR (measured) = 0.959 mW/g



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Date/Time: 30/06/2005 2:36:40 PM Date/Time: 30/06/2005 2:54:07 PM

Lab: RIM Testing Services (RTS)

**Body_Worn_KeyChain_Holster_Back_Facing_Phantom_CDMA
1900_Low_ChanAmbient_Temp_24_8_celsius_Liquid_Temp_22_5_celsius**

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: CDMA 1900; Frequency: 1851.25 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used: $f = 1851.25 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 50.7$; $\rho = 1000$

kg/m^3

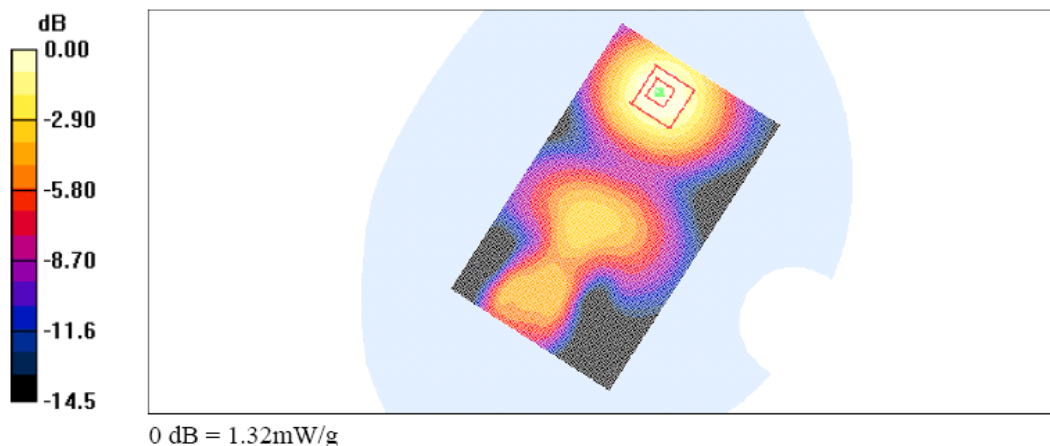
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.78, 4.78, 4.78); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (91x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 1.33 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 19.4 V/m; Power Drift = 0.181 dB
Peak SAR (extrapolated) = 1.85 W/kg
SAR(1 g) = 1.22 mW/g; SAR(10 g) = 0.762 mW/g
Maximum value of SAR (measured) = 1.32 mW/g



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Author Data Lauren Weber	Dates of Test June 20 – July 04, 2005	Test Report No RTS-0181-0507-02 rev. 01	FCC ID: L6ARAV20CW

Date/Time: 30/06/2005 4:43:27 PM Date/Time: 30/06/2005 5:00:48 PM

Lab: RIM Testing Services (RTS)

Body_Worn_Fabric_Holster_Back_Facing_Phantom_CDMA
1900_Low_ChanAmbient_Temp_25_9_celsius_Liquid_Temp_22_6_celsius

DUT: BlackBerry Wireless Handheld; Type: Sample

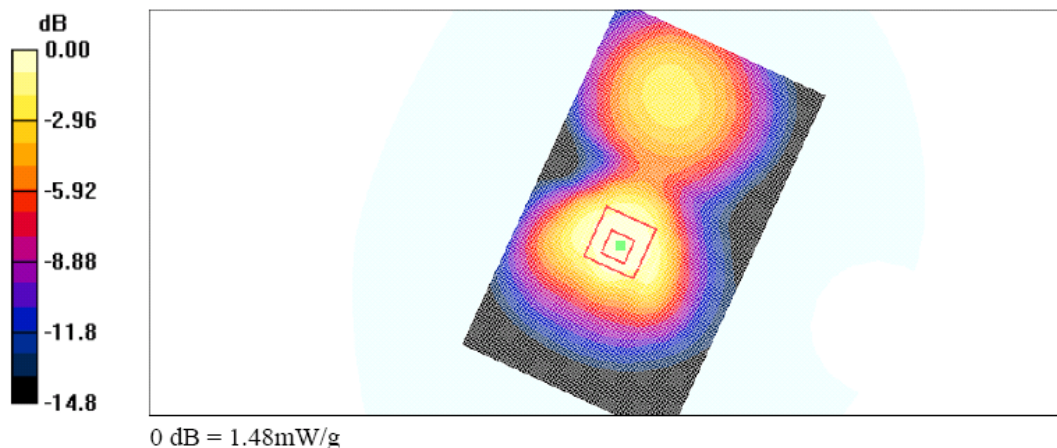
Communication System: CDMA 1900; Frequency: 1851.25 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used: $f = 1851.25 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 50.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.78, 4.78, 4.78); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (91x151x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 1.50 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 28.4 V/m; Power Drift = 0.026 dB
Peak SAR (extrapolated) = 1.70 W/kg
SAR(1 g) = 1.36 mW/g; SAR(10 g) = 0.905 mW/g
Maximum value of SAR (measured) = 1.48 mW/g



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Date/Time: 04/07/2005 9:48:11 AM Date/Time: 04/07/2005 10:06:06 AM

Lab: RIM Testing Services (RTS)

Body_Worn_Fabric_Holster_Back_Facing_Phantom_CDMA
1900_Low_Chann_batt2_Ambient_Temp_24_3_celsius_Liquid_Temp_22_5_celsius

DUT: BlackBerry Wireless Handheld; Type: Sample

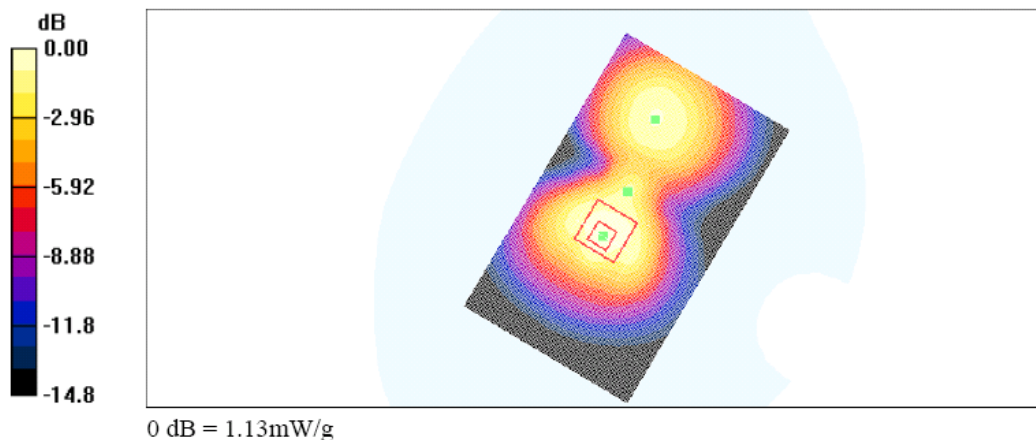
Communication System: CDMA 1900; Frequency: 1851.25 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used: $f = 1851.25 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 50.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.78, 4.78, 4.78); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (91x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 1.14 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 25.3 V/m; Power Drift = 0.124 dB
Peak SAR (extrapolated) = 1.27 W/kg
SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.670 mW/g
Maximum value of SAR (measured) = 1.13 mW/g



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Date/Time: 04/07/2005 10:31:02 AMDate/Time: 04/07/2005 10:48:28 AM

Lab: RIM Testing Services (RTS)

**Body_Worn_Fabric_Holster_Back_Facing_Phantom_CDMA
1900_Low_Chan_batt3_Ambient_Temp_24_1_celsius_Liquid_Temp_22_5_celsius**

DUT: BlackBerry Wireless Handheld; Type: Sample

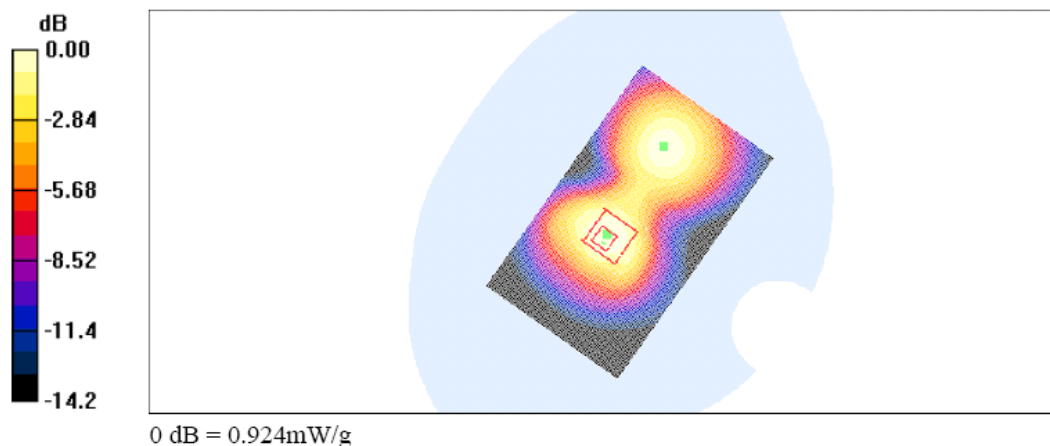
Communication System: CDMA 1900; Frequency: 1851.25 MHz;Duty Cycle: 1:1
Medium: M1900 Medium parameters used: $f = 1851.25 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 50.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.78, 4.78, 4.78); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (91x151x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.897 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.9 V/m; Power Drift = 0.088 dB
Peak SAR (extrapolated) = 1.06 W/kg
SAR(1 g) = 0.845 mW/g; SAR(10 g) = 0.557 mW/g
Maximum value of SAR (measured) = 0.924 mW/g



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		FCC ID: L6ARAV20CW

Date/Time: 04/07/2005 11:11:59 AM Date/Time: 04/07/2005 11:29:12 AM

Lab: RIM Testing Services (RTS)

Body_Worn_Fabric_Holster_Back_Facing_Phantom_CDMA
1900_Low_Chan_batt4_Ambient_Temp_24_4_celsius_Liquid_Temp_22_6_celsius

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: CDMA 1900; Frequency: 1851.25 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used: $f = 1851.25 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 50.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

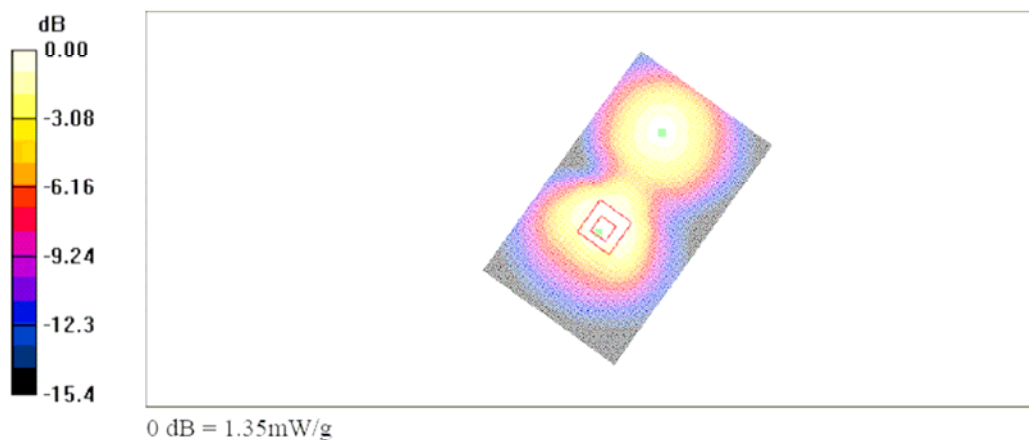
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.78, 4.78, 4.78); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (91x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 1.33 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 25.8 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 1.59 W/kg
SAR(1 g) = 1.22 mW/g; SAR(10 g) = 0.805 mW/g

Maximum value of SAR (measured) = 1.35 mW/g



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Date/Time: 04/07/2005 11:53:08 AM Date/Time: 04/07/2005 12:10:33 PM

Lab: RIM Testing Services (RTS)

**Body_Worn_Fabric_Holster_Back_Facing_Phantom_CDMA
1900_Low_Chan_batt1_headset_Ambient_Temp_24_0_celsius_Liquid_Temp_22_5_cel**

DUT: BlackBerry Wireless Handheld; Type: Sample

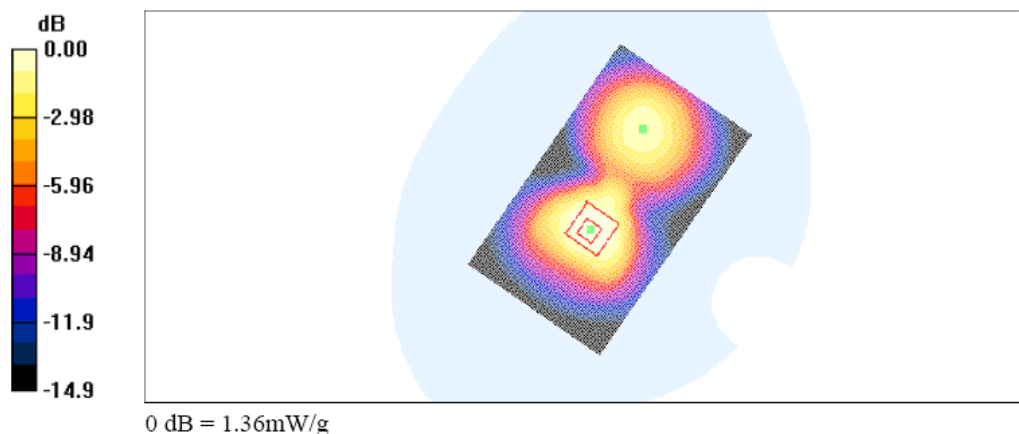
Communication System: CDMA 1900; Frequency: 1851.25 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used: $f = 1851.25 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 50.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.78, 4.78, 4.78); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (91x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 1.34 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 24.8 V/m; Power Drift = 0.126 dB
Peak SAR (extrapolated) = 1.62 W/kg
SAR(1 g) = 1.25 mW/g; SAR(10 g) = 0.835 mW/g
Maximum value of SAR (measured) = 1.36 mW/g



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Author Data	Dates of Test	Test Report No	FCC ID:
Lauren Weber	June 20 – July 04, 2005	RTS-0181-0507-02 rev. 01	L6ARAV20CW

Date/Time: 04/07/2005 2:21:44 PM Date/Time: 04/07/2005 2:39:09 PM

Lab: RIM Testing Services (RTS)

**Body_Worn_Fabric_Holster_Back_Facing_Phantom_CDMA
1900_Low_Chann_batt1_BlueTooth_Ambient_Temp_24_1_celsius_Liquid_Temp_22_3_**

DUT: BlackBerry Wireless Handheld; Type: Sample

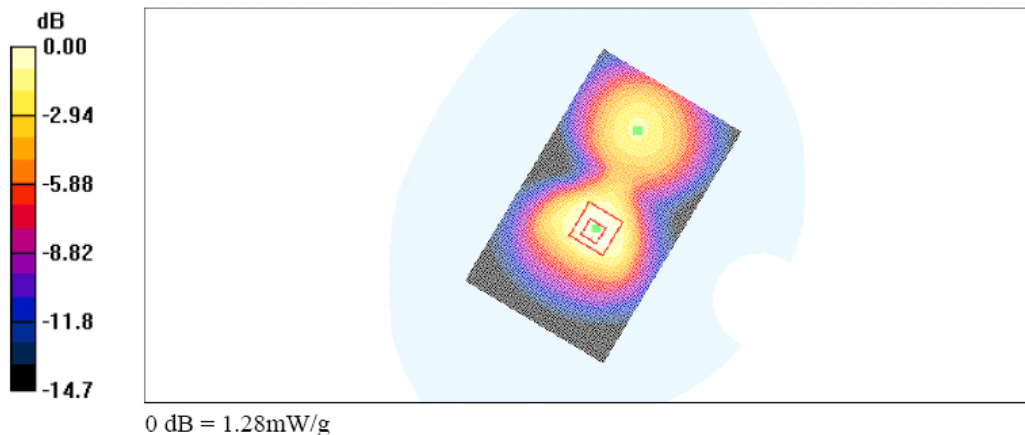
Communication System: CDMA 1900; Frequency: 1851.25 MHz; Duty Cycle: 1:1
Medium: M1900 Medium parameters used: $f = 1851.25 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 50.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.78, 4.78, 4.78); Calibrated: 07/01/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/01/2005
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body Worn/Area Scan (91x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 1.24 mW/g

Body Worn/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 26.1 V/m; Power Drift = 0.063 dB
Peak SAR (extrapolated) = 1.50 W/kg
SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.765 mW/g
Maximum value of SAR (measured) = 1.28 mW/g



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FCC ID: L6ARAV20CW		

Z-axis plots for worst-case body worn configuration:

