
 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		1(37)
Author Data	Dates of Test	Test Report No	FCC ID:
Daoud Attayi	May 03 – 13 & June 08 - 11, 2004	RIM-0086-0405-01	L6ARAP40GW

APPENDIX A: SAR DISTRIBUTION COMPARISON FOR THE ACCURACY VERIFICATION

 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		2(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 05/03/04 10:57:12

Test Laboratory: Research In Motion Limited

Ambient temperature: 24.4 deg. cel.; Liquid temperature: 23.0 deg. cel.;

835 MHz dipole validation

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446

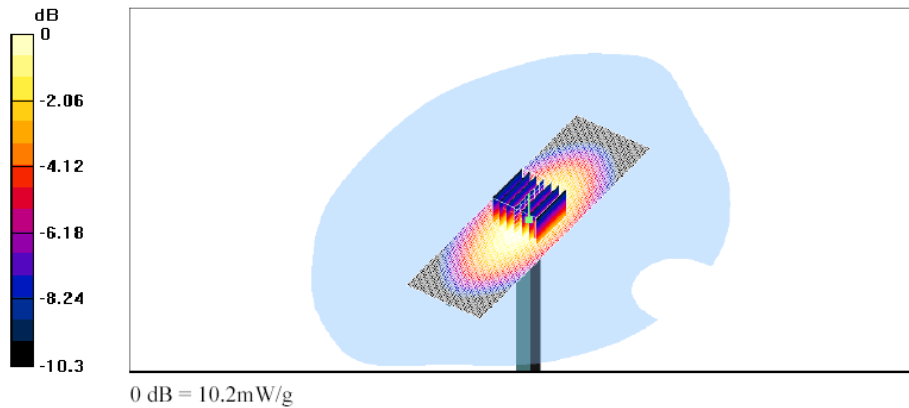
Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium: 835 MHz Head Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.9 \text{ mho/m}$; $\epsilon_r = 42.5$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:


- Probe: ET3DV6 - SN1643; ConvF(6.5, 6.5, 6.5); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Unnamed procedure/Area Scan (51x171x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Reference Value = 110.7 V/m; Power Drift = 0.009 dB
Maximum value of SAR (interpolated) = 10.2 mW/g

Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 110.7 V/m; Power Drift = 0.009 dB
Maximum value of SAR (measured) = 10.2 mW/g
Peak SAR (extrapolated) = 13.1 W/kg
SAR(1 g) = 9.37 mW/g; SAR(10 g) = 6.19 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		3(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 06/08/04 11:41:56

Test Laboratory: Research In Motion Limited

Dipole validation 1900 MHz; Ambient temp. 24.2 deg cel. ; Liquid temp. 22.8 deg. cel

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: HSL1900 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

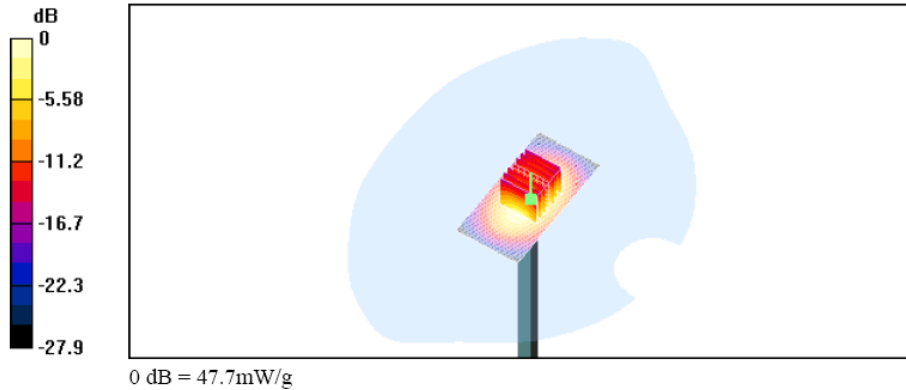
- Probe: ET3DV6 - SN1643; ConvF(5.2, 5.2, 5.2); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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


Reference Value = 191.7 V/m; Power Drift = 0.004 dB
Maximum value of SAR (measured) = 47.3 mW/g
Peak SAR (extrapolated) = 72.5 W/kg
SAR(1 g) = 41.6 mW/g; SAR(10 g) = 21.9 mW/g

Unnamed procedure/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 191.7 V/m; Power Drift = 0.004 dB
Maximum value of SAR (interpolated) = 47.7 mW/g



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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 4(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

Page 1 of 1

Date/Time: 06/10/04 08:45:59

Test Laboratory: Research In Motion Limited

Dipole validation 1900 MHz; Ambient temp. 24.6 deg cel. ; Liquid temp. 22.4 deg. cel

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: HSL1900 Medium parameters used: $f = 1900$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

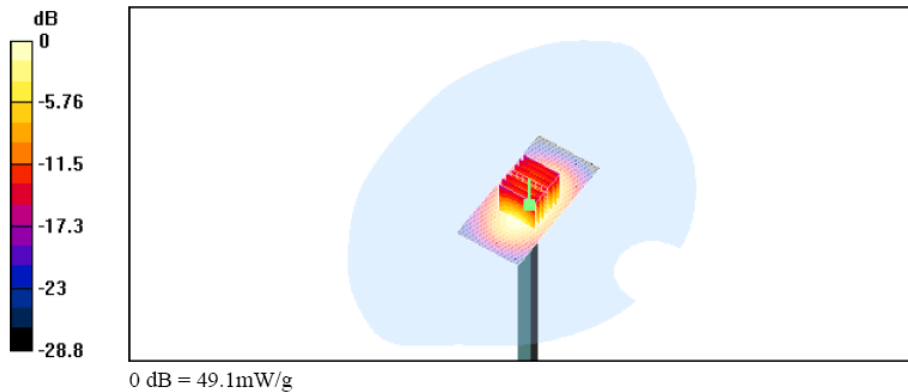
- Probe: ET3DV6 - SN1643; ConvF(5.2, 5.2, 5.2); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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


Reference Value = 189.4 V/m; Power Drift = -0.1 dB
Maximum value of SAR (measured) = 49.1 mW/g
Peak SAR (extrapolated) = 75.1 W/kg
SAR(1 g) = 42.7 mW/g; SAR(10 g) = 22.4 mW/g

Unnamed procedure/Area Scan (51x101x1): Measurement grid: dx=10mm, dy=10mm


Reference Value = 189.4 V/m; Power Drift = -0.1 dB
Maximum value of SAR (interpolated) = 49.1 mW/g



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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 5(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

APPENDIX B: SAR DISTRIBUTION PLOTS FOR HEAD CONFIGURATION

 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 6(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

Date/Time: 05/03/04 11:45:25

Test Laboratory: Research In Motion Limited

Ambient temperature: 24.5 deg. cel.; Liquid temperature: 23.1 deg. cel.;

Touch left mid chan; GSM 850 band

DUT: BlackBerry Wireless Handheld; Type: Sample ; Serial: 1003205029

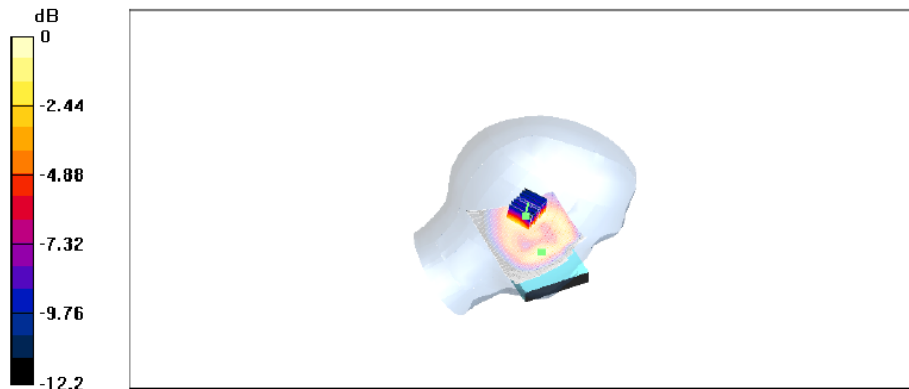
Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3
 Medium: 835 MHz Head Medium parameters used: $f = 836.8$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:


- Probe: ET3DV6 - SN1643; ConvF(6.5, 6.5, 6.5); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM I; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Unnamed procedure/Area Scan (101x121x1): Measurement grid: dx=10mm, dy=10mm
 Reference Value = 16.6 V/m; Power Drift = 0.006 dB
 Maximum value of SAR (interpolated) = 0.260 mW/g

Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 16.6 V/m; Power Drift = 0.006 dB
 Maximum value of SAR (measured) = 0.264 mW/g
 Peak SAR (extrapolated) = 0.390 W/kg
SAR(1 g) = 0.235 mW/g; SAR(10 g) = 0.140 mW/g



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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 7(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

Date/Time: 05/03/04 11:45:38

Test Laboratory: Research In Motion Limited

Ambient temperature: 24.3 deg. cel.; Liquid temperature: 23.0 deg. cel.;

Tilted left mid chan; GSM 850 band

DUT: BlackBerry Wireless Handheld; Type: Sample ; Serial: 1003205029

Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3
Medium: 835 MHz Head Medium parameters used: $f = 836.8 \text{ MHz}$; $\sigma = 0.9 \text{ mho/m}$; $\epsilon_r = 42.5$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section

DASY4 Configuration:

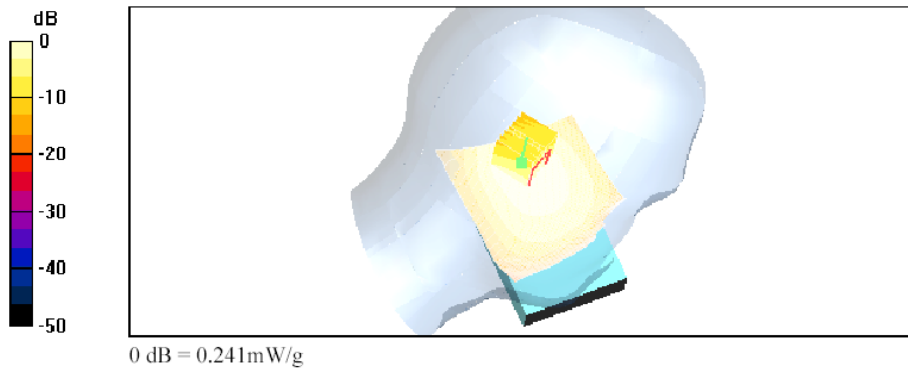
- Probe: ET3DV6 - SN1643; ConvF(6.5, 6.5, 6.5); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

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


Reference Value = 16.5 V/m; Power Drift = -0.1 dB
Maximum value of SAR (measured) = 0.243 mW/g
Peak SAR (extrapolated) = 0.335 W/kg
SAR(1 g) = 0.220 mW/g; SAR(10 g) = 0.144 mW/g

Unnamed procedure/Area Scan (101x121x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 16.5 V/m; Power Drift = -0.1 dB
Maximum value of SAR (interpolated) = 0.241 mW/g



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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 8(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

Date/Time: 05/05/04 17:13:18

Test Laboratory: Research In Motion Limited

Ambient temperature: 24.6 deg. cel.; liquid temperature: 23.2 deg. cel.

Touch left with Bluetooth mid chan

DUT: BlackBerry Wireless Handheld; Type: Sample

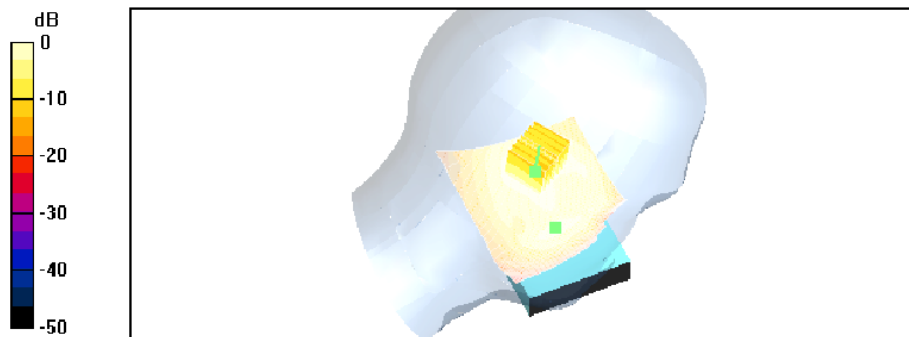
Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3
Medium: 835 MHz Head Medium parameters used: $f = 836.8 \text{ MHz}$; $\sigma = 0.9 \text{ mho/m}$; $\epsilon_r = 42.5$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(6.5, 6.5, 6.5); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM I; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109


Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.4 V/m; Power Drift = -0.005 dB
Maximum value of SAR (measured) = 0.273 mW/g
Peak SAR (extrapolated) = 0.491 W/kg
SAR(1 g) = 0.255 mW/g; SAR(10 g) = 0.159 mW/g

Unnamed procedure/Area Scan (101x121x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 17.4 V/m; Power Drift = -0.005 dB
Maximum value of SAR (interpolated) = 0.278 mW/g



0 dB = 0.278mW/g

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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 9(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

Date/Time: 05/03/04 15:03:48

Test Laboratory: Research In Motion Limited

Ambient temperature: 24.2 deg. cel.; Liquid temperature: 22.8 deg. cel.

Touch right mid chan; GSM 850 band

DUT: BlackBerry Wireless Handheld; Type: Sample ; Serial: 1003205029

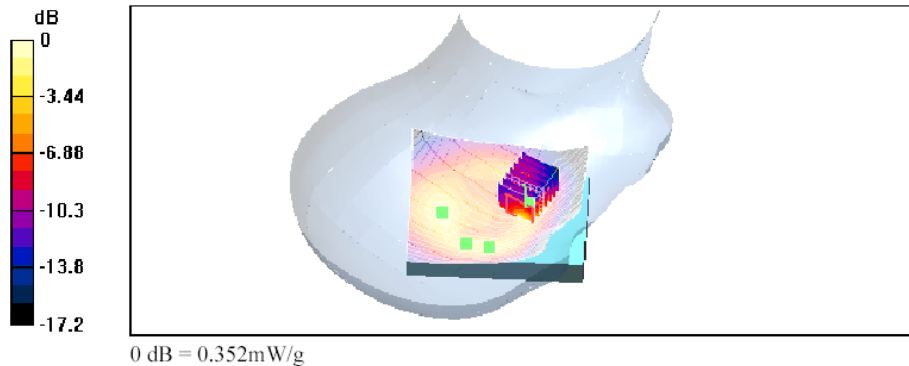
Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3
Medium: 835 MHz Head Medium parameters used: $f = 836.8$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY4 Configuration:


- Probe: ET3DV6 - SN1643; ConvF(6.5, 6.5, 6.5); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Unnamed procedure/Area Scan (101x121x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 16.5 V/m; Power Drift = -0.006 dB
Maximum value of SAR (interpolated) = 0.296 mW/g

Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.5 V/m; Power Drift = -0.006 dB
Maximum value of SAR (measured) = 0.352 mW/g
Peak SAR (extrapolated) = 0.975 W/kg
SAR(1 g) = 0.260 mW/g; SAR(10 g) = 0.118 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		10(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 05/03/04 15:03:59

Test Laboratory: Research In Motion Limited

Ambient temperature: 24.0 deg. cel.; Liquid temperature: 22.7 deg. cel.;

Tilted right mid chan; GSM 850 band; GS-Melcotec battery BAT-03087-003

DUT: BlackBerry Wireless Handheld; Type: Sample ; Serial: 1003205029

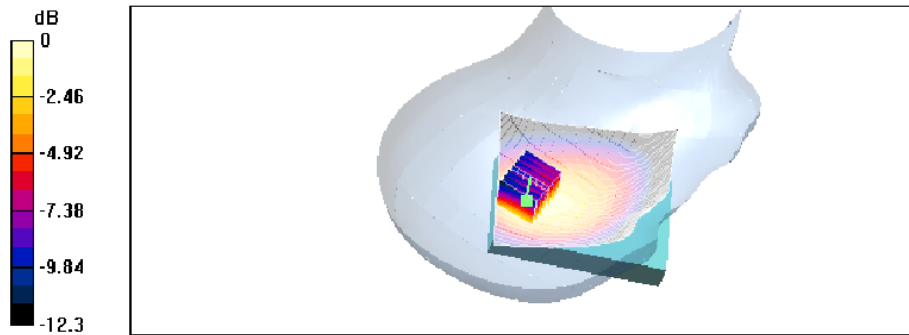
Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3
Medium: 835 MHz Head Medium parameters used: $f = 836.8$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(6.5, 6.5, 6.5); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109


Unnamed procedure/Area Scan (101x121x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 15.5 V/m; Power Drift = -0.0 dB
Maximum value of SAR (interpolated) = 0.256 mW/g

Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.5 V/m; Power Drift = -0.0 dB
Maximum value of SAR (measured) = 0.256 mW/g
Peak SAR (extrapolated) = 0.355 W/kg
SAR(1 g) = 0.234 mW/g; SAR(10 g) = 0.151 mW/g



0 dB = 0.256mW/g

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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 11(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

Page 1 of 1

Date/Time: 05/03/04 17:05:51

Test Laboratory: Research In Motion Limited

Ambient temperature: 23.6 deg. cel.; Liquid temperature: 22.6 deg. cel.;

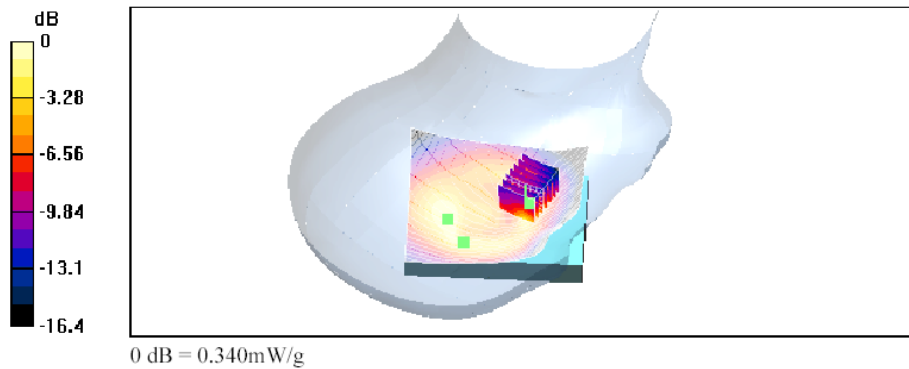
Touch right mid chan; GSM 850 band; with Bluetooth On

Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3
Medium: 835 MHz Head Medium parameters used: $f = 836.8$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³
Phantom section: Right Section


- DASY4 Configuration:
- Probe: ET3DV6 - SN1643; ConvF(6.5, 6.5, 6.5); Calibrated: 09/10/2003
 - Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
 - Electronics: DAE3 Sn472; Calibrated: 19/08/2003
 - Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
 - Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Unnamed procedure/Area Scan (101x121x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 17.1 V/m; Power Drift = 0.0005 dB
Maximum value of SAR (interpolated) = 0.320 mW/g

Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.1 V/m; Power Drift = 0.0005 dB
Maximum value of SAR (measured) = 0.340 mW/g
Peak SAR (extrapolated) = 0.858 W/kg
SAR(1 g) = 0.249 mW/g; SAR(10 g) = 0.119 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		12(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 05/03/04 16:27:08

Test Laboratory: Research In Motion Limited

Touch right; GSM 850; mid chan; Sanyo battery; Ambient temp. 22.6 deg cel; Liquid temp. 22.6 deg cel

DUT: BlackBerry Wireless Handheld; Type: Sample

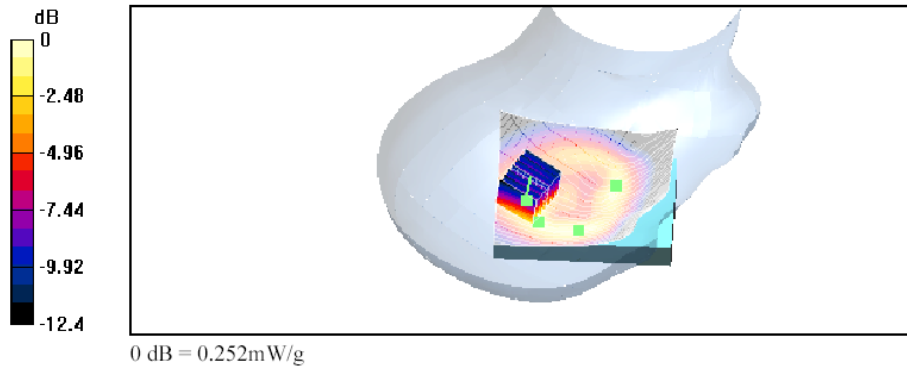
Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3
Medium: 835 MHz Head Medium parameters used: $f = 836.8$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY4 Configuration:


- Probe: ET3DV6 - SN1643; ConvF(6.5, 6.5, 6.5); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM I; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

Unnamed procedure/Area Scan (101x121x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 15.4 V/m; Power Drift = 0.0 dB
Maximum value of SAR (interpolated) = 0.249 mW/g

Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.4 V/m; Power Drift = 0.0 dB
Maximum value of SAR (measured) = 0.252 mW/g
Peak SAR (extrapolated) = 0.391 W/kg
SAR(1 g) = 0.227 mW/g; SAR(10 g) = 0.133 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		13(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 05/05/04 16:36:58

Test Laboratory: Research In Motion Limited

Ambient temperature: 24.2 deg. cel.; liquid temperature: 22.8 deg. cel.

Touch right mid chan; GSM 850 band; Sanyo GS higher capacity battery BAT- 06532-001

DUT: BlackBerry Wireless Handheld; Type: Sample

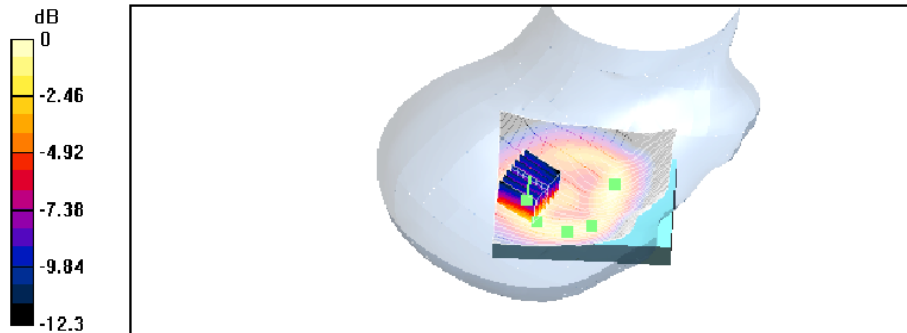
Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3
Medium: 835 MHz Head Medium parameters used: $f = 836.8 \text{ MHz}$; $\sigma = 0.9 \text{ mho/m}$; $\epsilon_r = 42.5$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(6.5, 6.5, 6.5); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109


Unnamed procedure/Area Scan (101x121x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 15.2 V/m; Power Drift = 0.1 dB
Maximum value of SAR (interpolated) = 0.245 mW/g

Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.2 V/m; Power Drift = 0.1 dB
Maximum value of SAR (measured) = 0.251 mW/g
Peak SAR (extrapolated) = 0.378 W/kg
SAR(1 g) = 0.223 mW/g; SAR(10 g) = 0.131 mW/g



0 dB = 0.251mW/g

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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		14(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Date/Time: 06/08/04 12:16:44

Test Laboratory: Research In Motion Limited

Touch left GSM 1900; Mid chan; Ambient temp. 24.2 deg cel. ; Liquid temp. 22.8 deg. cel.da4

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³
Phantom section: Left Section

DASY4 Configuration:

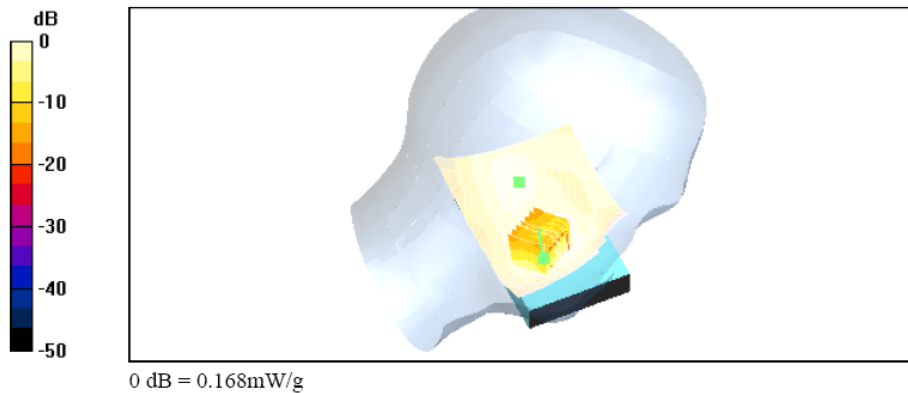
- Probe: ET3DV6 - SN1643; ConvF(5.2, 5.2, 5.2); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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


Reference Value = 10.7 V/m; Power Drift = -0.0 dB
Maximum value of SAR (measured) = 0.157 mW/g
Peak SAR (extrapolated) = 0.211 W/kg
SAR(1 g) = 0.144 mW/g; SAR(10 g) = 0.087 mW/g

Unnamed procedure/Area Scan (101x131x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 10.7 V/m; Power Drift = -0.0 dB
Maximum value of SAR (interpolated) = 0.168 mW/g



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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 15(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

Page 1 of 1

Date/Time: 06/08/04 13:09:59

Test Laboratory: Research In Motion Limited

Tilted left GSM 1900; Mid chan; Ambient temp. 23.8 deg cel.; Liquid temp. 22.6 deg. cel

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium: HSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³
Phantom section: Left Section

DASY4 Configuration:

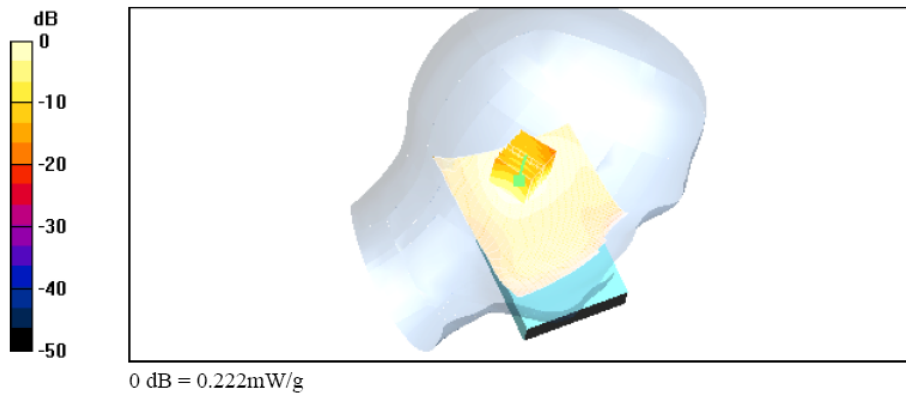
- Probe: ET3DV6 - SN1643; ConvF(5.2, 5.2, 5.2); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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


Reference Value = 13.2 V/m; Power Drift = 0.1 dB
Maximum value of SAR (measured) = 0.220 mW/g
Peak SAR (extrapolated) = 0.287 W/kg
SAR(1 g) = 0.201 mW/g; SAR(10 g) = 0.121 mW/g

Unnamed procedure/Area Scan (101x131x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 13.2 V/m; Power Drift = 0.1 dB
Maximum value of SAR (interpolated) = 0.222 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		16(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 06/09/04 09:25:22

Test Laboratory: Research In Motion Limited

Tilted left GSM 1900; Mid chan; Bluetooth On; Ambient temp. 23.0 deg cel.; Liquid temp. 21.6 deg. cel

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium: HSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³
Phantom section: Left Section

DASY4 Configuration:

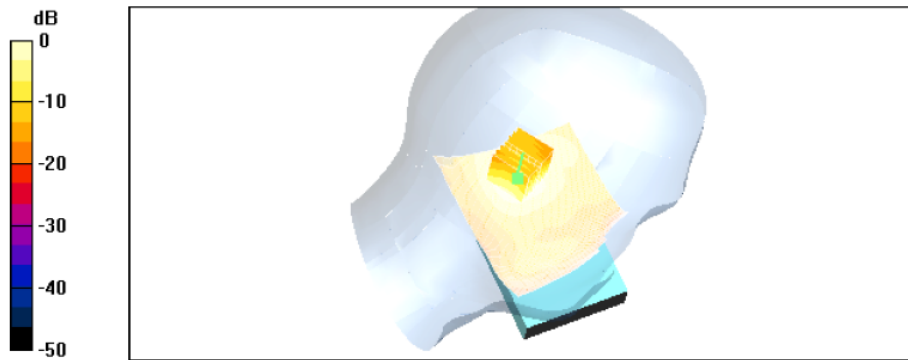
- Probe: ET3DV6 - SN1643; ConvF(5.2, 5.2, 5.2); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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


Reference Value = 13.5 V/m; Power Drift = 0.0 dB
Maximum value of SAR (measured) = 0.234 mW/g
Peak SAR (extrapolated) = 0.307 W/kg
SAR(1 g) = 0.212 mW/g; SAR(10 g) = 0.128 mW/g

Unnamed procedure/Area Scan (101x131x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 13.5 V/m; Power Drift = 0.0 dB
Maximum value of SAR (interpolated) = 0.238 mW/g



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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 17(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

Date/Time: 06/08/04 13:49:09

Test Laboratory: Research In Motion Limited

Touch right GSM 1900; Mid chan; Ambient temp. 23.9 deg cel. ; Liquid temp. 22.8 deg. cel

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.42 \text{ mho/m}$; $\epsilon_r = 39.1$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Right Section

DASY4 Configuration:

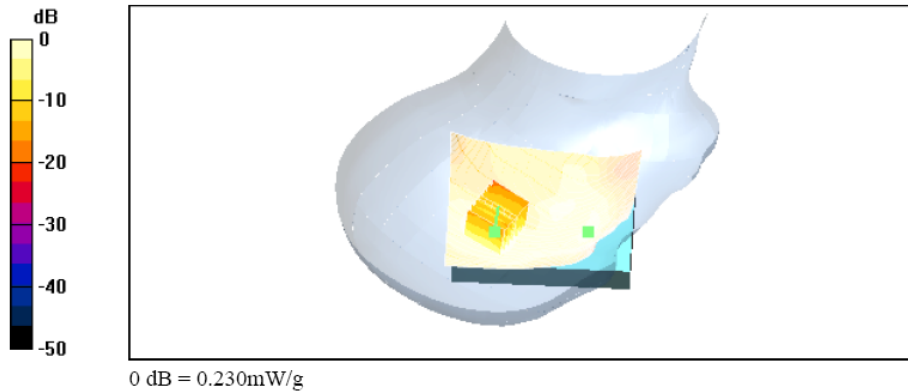
- Probe: ET3DV6 - SN1643; ConvF(5.2, 5.2, 5.2); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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


Reference Value = 8.5 V/m; Power Drift = -0.6 dB
 Maximum value of SAR (measured) = 0.238 mW/g
 Peak SAR (extrapolated) = 0.303 W/kg
SAR(1 g) = 0.211 mW/g; SAR(10 g) = 0.118 mW/g

Unnamed procedure/Area Scan (101x131x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Reference Value = 8.5 V/m; Power Drift = -0.6 dB
 Maximum value of SAR (interpolated) = 0.230 mW/g



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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 18(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

Page 1 of 1

Date/Time: 06/08/04 14:36:49

Test Laboratory: Research In Motion Limited

Tilted right GSM 1900; Mid chan; Ambient temp. 24.1 deg cel. ; Liquid temp. 22.7 deg. cel

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.42 \text{ mho/m}$; $\epsilon_r = 39.1$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

DASY4 Configuration:

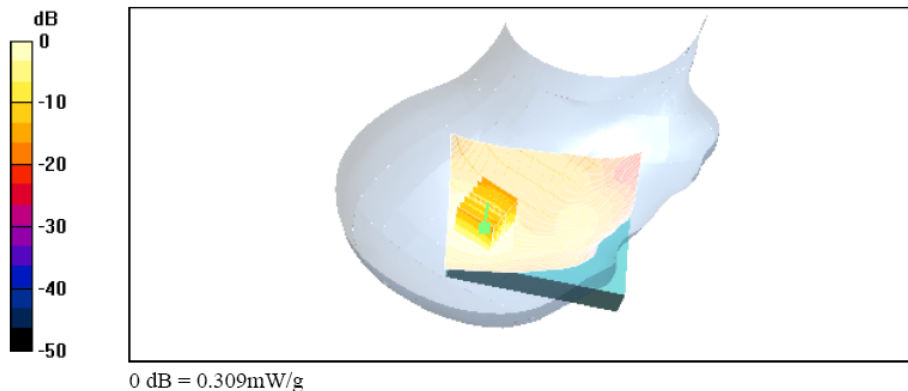
- Probe: ET3DV6 - SN1643; ConvF(5.2, 5.2, 5.2); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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


Reference Value = 12.4 V/m; Power Drift = 0.1 dB
Maximum value of SAR (measured) = 0.311 mW/g
Peak SAR (extrapolated) = 0.410 W/kg
SAR(1 g) = 0.282 mW/g; SAR(10 g) = 0.167 mW/g

Unnamed procedure/Area Scan (101x131x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Reference Value = 12.4 V/m; Power Drift = 0.1 dB
Maximum value of SAR (interpolated) = 0.309 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		19(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 06/08/04 15:17:16

Test Laboratory: Research In Motion Limited

Tilted right GSM 1900; Mid chan; BAT-03487-002 Sanyo battery; Ambient temp. 24.1 deg cel. ; Liquid temp. 22.6 deg. cel

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium: HSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³
Phantom section: Right Section

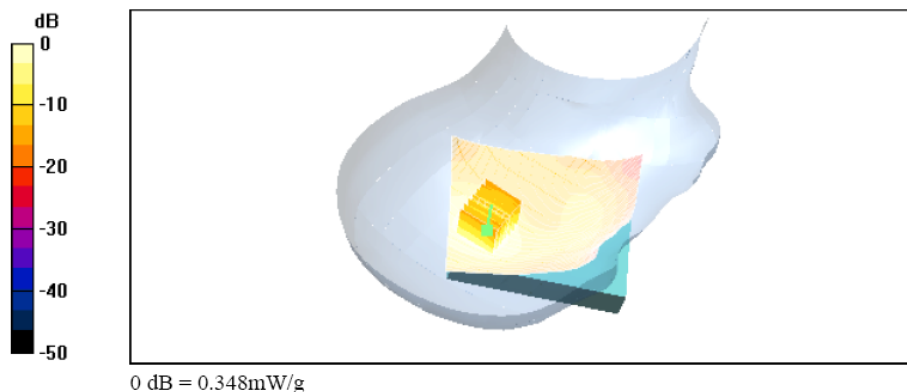
DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(5.2, 5.2, 5.2); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112


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

Reference Value = 13.9 V/m; Power Drift = -0.1 dB
Maximum value of SAR (measured) = 0.344 mW/g
Peak SAR (extrapolated) = 0.449 W/kg
SAR(1 g) = 0.311 mW/g; SAR(10 g) = 0.185 mW/g

Unnamed procedure/Area Scan (101x131x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 13.9 V/m; Power Drift = -0.1 dB
Maximum value of SAR (interpolated) = 0.348 mW/g



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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 20(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

Page 1 of 1

Date/Time: 06/08/04 17:23:07

Test Laboratory: Research In Motion Limited

Tilted right GSM 1900; Mid chan; BAT-06532-001 higher cap. battery; Ambient temp. 23.6 deg cel.; Liquid temp. 22.5 deg. cel

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium: HSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY4 Configuration:

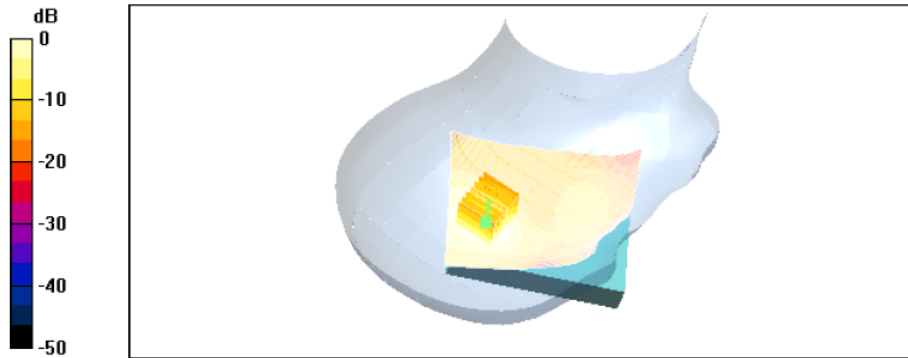
- Probe: ET3DV6 - SN1643; ConvF(5.2, 5.2, 5.2); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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


Reference Value = 13 V/m; Power Drift = 0.0 dB
Maximum value of SAR (measured) = 0.283 mW/g
Peak SAR (extrapolated) = 0.378 W/kg
SAR(1 g) = 0.258 mW/g; SAR(10 g) = 0.154 mW/g

Unnamed procedure/Area Scan (101x131x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 13 V/m; Power Drift = 0.0 dB
Maximum value of SAR (interpolated) = 0.286 mW/g



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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 21(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

Date/Time: 06/09/04 08:41:29

Test Laboratory: Research In Motion Limited

**Tilted right GSM 1900; Mid chan; BAT-03487-002 Sanyo battery; Bluetooth ON;
Ambient temp. 23.4 deg cel. ; Liquid temp. 21.6 deg. cel**

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.42 \text{ mho/m}$; $\epsilon_r = 39.1$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

DASY4 Configuration:

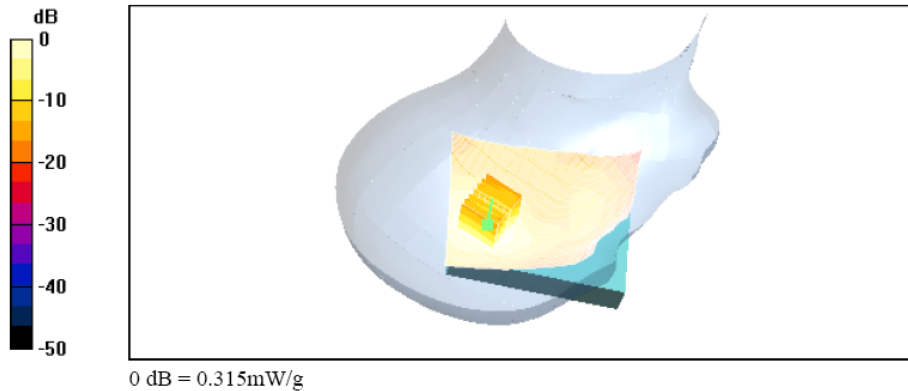
- Probe: ET3DV6 - SN1643; ConvF(5.2, 5.2, 5.2); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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


Reference Value = 13.7 V/m; Power Drift = -0.1 dB
Maximum value of SAR (measured) = 0.309 mW/g
Peak SAR (extrapolated) = 0.412 W/kg
SAR(1 g) = 0.282 mW/g; SAR(10 g) = 0.169 mW/g

Unnamed procedure/Area Scan (101x131x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$


Reference Value = 13.7 V/m; Power Drift = -0.1 dB
Maximum value of SAR (interpolated) = 0.315 mW/g



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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report	Page 22(37)	
Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

**APPENDIX C: SAR DISTRIBUTION PLOTS FOR BODY-WORN
CONFIGURATION**

 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		23(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 05/04/04 11:37:58

Test Laboratory: Research In Motion Limited

Ambient temperature: 24.5 deg. cel.; liquid temperature: 22.0 deg. cel.

Body-worn with holster mid chan

DUT: BlackBerry Wireless Handheld; Type: Sample ; Serial: 1003205029

Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3

Medium: M 835 Medium parameters used: $f = 836.8$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54.3$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(6.3, 6.3, 6.3); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

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

Reference Value = 15.9 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 0.231 mW/g

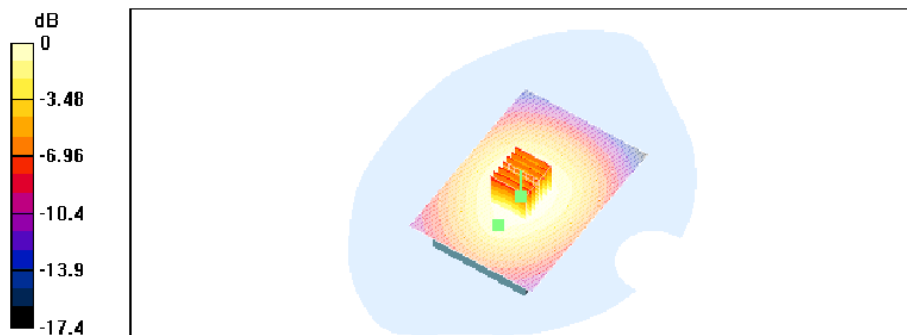
Peak SAR (extrapolated) = 0.278 W/kg

SAR(1 g) = 0.218 mW/g; SAR(10 g) = 0.163 mW/g

Unnamed procedure/Area Scan (101x141x1): Measurement grid: dx=10mm, dy=10mm


Reference Value = 15.9 V/m; Power Drift = -0.1 dB

Maximum value of SAR (interpolated) = 0.232 mW/g



0 dB = 0.232mW/g

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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		24(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 05/04/04 11:38:14

Test Laboratory: Research In Motion Limited

Ambient temperature: 24.5 deg. cel.; liquid temperature: 22.1 deg. cel.

Body-worn with leather swivel holster mid chan

DUT: BlackBerry Wireless Handheld; Type: Sample ; Serial: 1003205029

Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3

Medium: M 835 Medium parameters used: $f = 836.8 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 54.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(6.3, 6.3, 6.3); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

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

Reference Value = 16.2 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 0.250 mW/g

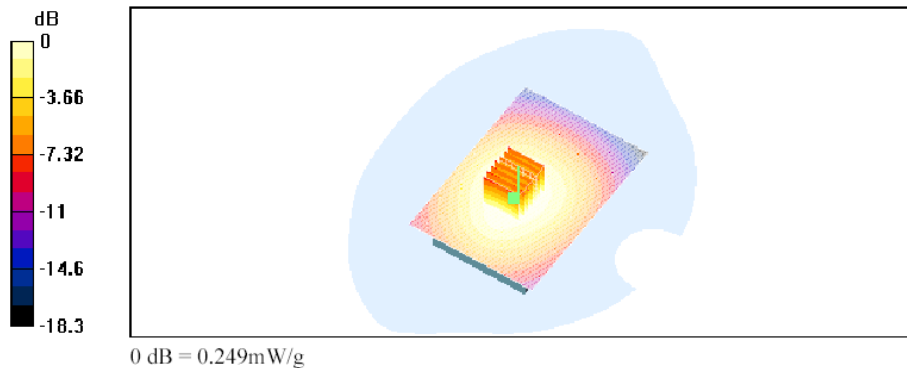
Peak SAR (extrapolated) = 0.298 W/kg

SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.177 mW/g


Unnamed procedure/Area Scan (101x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 16.2 V/m; Power Drift = -0.1 dB

Maximum value of SAR (interpolated) = 0.249 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		25(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 05/04/04 13:26:47

Test Laboratory: Research In Motion Limited

Ambient temperature: 23.2 deg. cel.; liquid temperature: 21.8 deg. cel.

Body-worn with horizontal foam holster high chan back side

DUT: BlackBerry Wireless Handheld; Type: Sample ; Serial: 1003205029

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
Medium: M 835 Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54.3$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

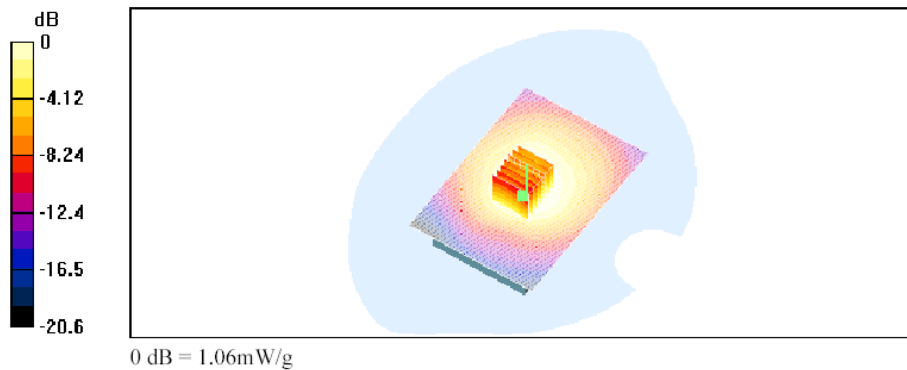
- Probe: ET3DV6 - SN1643; ConvF(6.3, 6.3, 6.3); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

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


Reference Value = 34.4 V/m; Power Drift = -0.1 dB
Maximum value of SAR (measured) = 1.06 mW/g
Peak SAR (extrapolated) = 1.31 W/kg
SAR(1 g) = 1.000 mW/g; SAR(10 g) = 0.738 mW/g

Unnamed procedure/Area Scan (101x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 34.4 V/m; Power Drift = -0.1 dB
Maximum value of SAR (interpolated) = 1.06 mW/g



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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 26(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

Page 1 of 1

Date/Time: 05/04/04 11:41:40

Test Laboratory: Research In Motion Limited

Ambient temperature: 23.8 deg. cel.; liquid temperature: 22.0 deg. cel.

Body-worn with vertical foam holster mid chan back side

DUT: BlackBerry Wireless Handheld; Type: Sample ; Serial:1003205029

Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3

Medium: M 835 Medium parameters used: $f = 836.8 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 54.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(6.3, 6.3, 6.3); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

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

Reference Value = 29.8 V/m; Power Drift = -0.0 dB

Maximum value of SAR (measured) = 1.15 mW/g

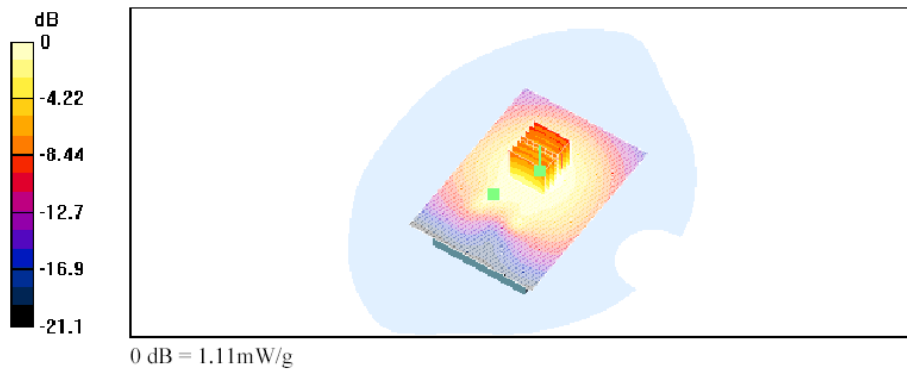
Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.713 mW/g


Unnamed procedure/Area Scan (101x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 29.8 V/m; Power Drift = -0.0 dB

Maximum value of SAR (interpolated) = 1.11 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		27(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 05/05/04 15:32:53

Test Laboratory: Research In Motion Limited

Ambient temperature: 24.1 deg. cel.; liquid temperature: 22.6 deg. cel.

Body-worn with vertical foam holster and Bluetooth mid chan back side

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3

Medium: M 835 Medium parameters used: $f = 836.8 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 54.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(6.3, 6.3, 6.3); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

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

Reference Value = 27.6 V/m; Power Drift = -0.2 dB

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

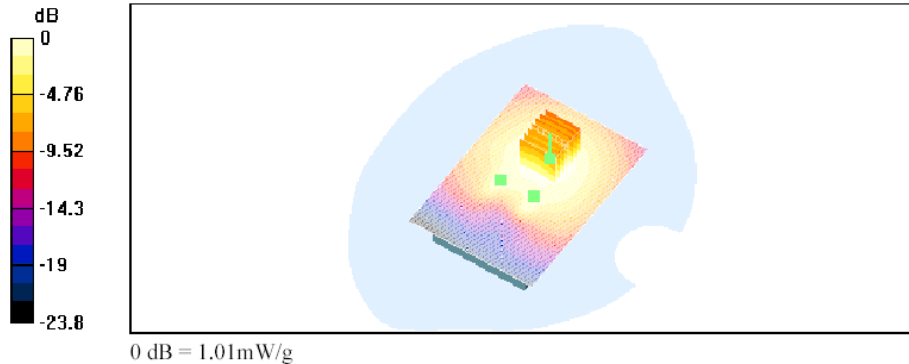
Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 0.951 mW/g; SAR(10 g) = 0.655 mW/g


Unnamed procedure/Area Scan (101x141x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Reference Value = 27.6 V/m; Power Drift = -0.2 dB

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



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		28(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 05/05/04 10:04:36

Test Laboratory: Research In Motion Limited

Ambient temperature: 24.5 deg. cel.; liquid temperature: 22.8 deg. cel.

Body-worn with vertical foam holster Sanyo batt mid chan back side

DUT: BlackBerry Wireless Handheld; Type: Sample ; Serial: 1003205029

Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3

Medium: M 835 Medium parameters used: $f = 836.8 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 54.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(6.3, 6.3, 6.3); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

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

Reference Value = 29.5 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 1.07 mW/g

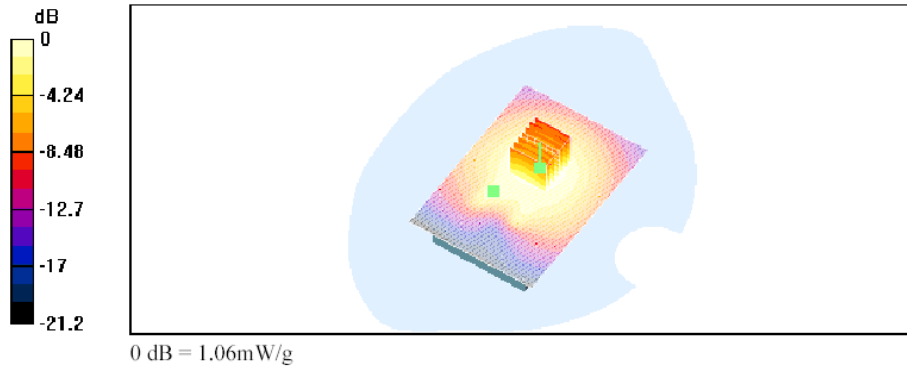
Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.995 mW/g; SAR(10 g) = 0.682 mW/g


Unnamed procedure/Area Scan (101x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 29.5 V/m; Power Drift = -0.1 dB

Maximum value of SAR (interpolated) = 1.06 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		29(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 05/05/04 10:43:23

Test Laboratory: Research In Motion Limited

Ambient temperature: 24.1 deg. cel.; liquid temperature: 22.6 deg. cel.

Body-worn with vertical foam holster higher capacity batt mid chan back side

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3

Medium: M 835 Medium parameters used: $f = 836.8 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 54.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(6.3, 6.3, 6.3); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

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

Reference Value = 25.3 V/m; Power Drift = -0.0 dB

Maximum value of SAR (measured) = 0.779 mW/g

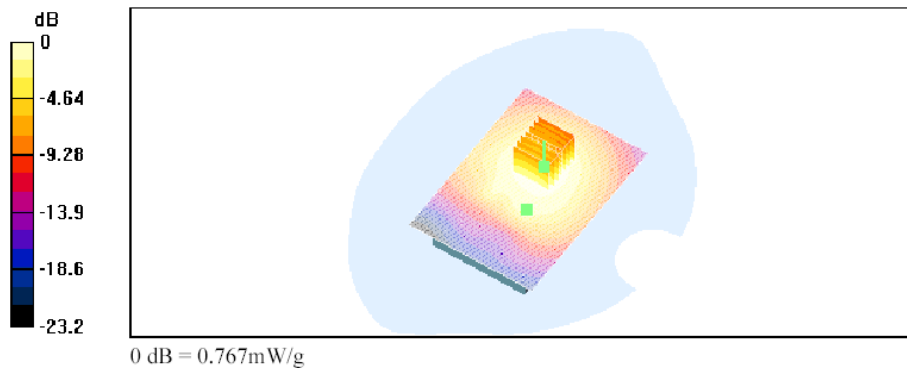
Peak SAR (extrapolated) = 0.977 W/kg

SAR(1 g) = 0.723 mW/g; SAR(10 g) = 0.511 mW/g


Unnamed procedure/Area Scan (101x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 25.3 V/m; Power Drift = -0.0 dB

Maximum value of SAR (interpolated) = 0.767 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		30(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 05/05/04 11:20:27

Test Laboratory: Research In Motion Limited

Ambient temperature: 24.0 deg. cel.; liquid temperature: 22.5 deg. cel.

Body-worn with vertical foam holster and headset mid chan back side

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: GSM 850; Frequency: 836.8 MHz; Duty Cycle: 1:8.3

Medium: M 835 Medium parameters used: $f = 836.8 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 54.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(6.3, 6.3, 6.3); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 2; Type: SAM 4.0; Serial: 1080
- Measurement SW: DASY4, V4.2 Build 37; Postprocessing SW: SEMCAD, V1.8 Build 109

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

Reference Value = 28.7 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 0.981 mW/g

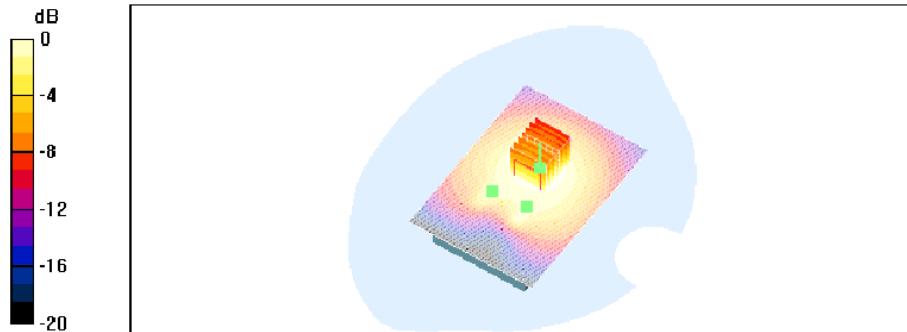
Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.916 mW/g; SAR(10 g) = 0.631 mW/g


Unnamed procedure/Area Scan (101x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 28.7 V/m; Power Drift = -0.1 dB

Maximum value of SAR (interpolated) = 0.962 mW/g



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 RESEARCH IN MOTION	Document Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		Page 31(37)
	Author Data Daoud Attayi	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01

Page 1 of 1

Date/Time: 06/09/04 13:52:21

Test Laboratory: Research In Motion Limited

Body-worn with Plastic Swivel Holster; GSM 1900; Mid chan; Ambient temp. 22.8 deg cel. ; Liquid temp. 21.5 deg. cel

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.57 \text{ mho/m}$; $\epsilon_r = 50.3$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

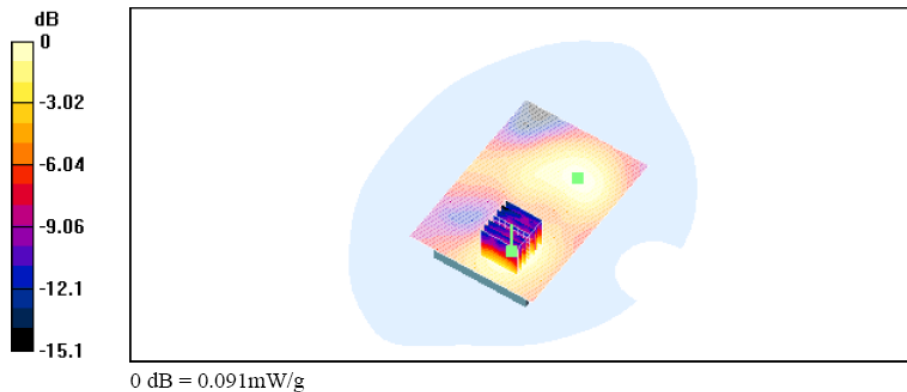
- Probe: ET3DV6 - SN1643; ConvF(4.8, 4.8, 4.8); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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


Reference Value = 4.85 V/m; Power Drift = 0.1 dB
Maximum value of SAR (measured) = 0.088 mW/g
Peak SAR (extrapolated) = 0.118 W/kg
SAR(1 g) = 0.081 mW/g; SAR(10 g) = 0.051 mW/g

Unnamed procedure/Area Scan (101x141x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Reference Value = 4.85 V/m; Power Drift = 0.1 dB
Maximum value of SAR (interpolated) = 0.091 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		32(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Date/Time: 06/09/04 14:46:53

Test Laboratory: Research In Motion Limited

Body-worn with Leather Swivel Holster; GSM 1900; Mid chan; Ambient temp. 23.0 deg cel.; Liquid temp. 21.7 deg. cel

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium: M1900 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.57 \text{ mho/m}$; $\epsilon_r = 50.3$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

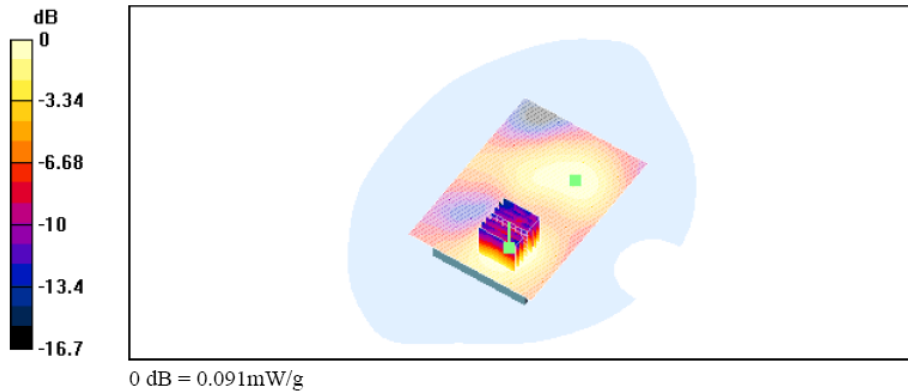
DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(4.8, 4.8, 4.8); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112


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

Reference Value = 4.86 V/m; Power Drift = -0.4 dB
Maximum value of SAR (measured) = 0.090 mW/g
Peak SAR (extrapolated) = 0.125 W/kg
SAR(1 g) = 0.083 mW/g; SAR(10 g) = 0.051 mW/g

Unnamed procedure/Area Scan (101x141x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Reference Value = 4.86 V/m; Power Drift = -0.4 dB
Maximum value of SAR (interpolated) = 0.091 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		33(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 06/09/04 15:28:09

Test Laboratory: Research In Motion Limited

**Body-worn with Horizontal Foam Holster; GSM 1900; Low chan; Ambient temp. 23.2 deg cel.;
Liquid temp. 21.8 deg. cel**

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: M1900 Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.57 \text{ mho/m}$; $\epsilon_r = 50.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(4.8, 4.8, 4.8); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 22.5 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 1.38 mW/g

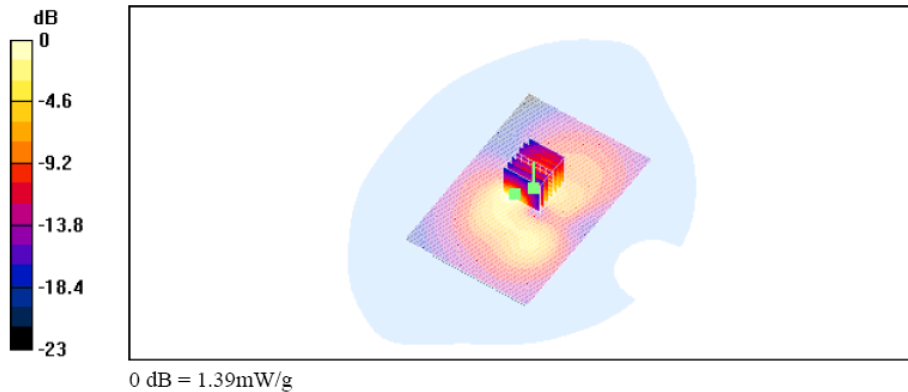
Peak SAR (extrapolated) = 2.93 W/kg

SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.592 mW/g


Unnamed procedure/Area Scan (101x151x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Reference Value = 22.5 V/m; Power Drift = -0.1 dB

Maximum value of SAR (interpolated) = 1.39 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		34(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 06/10/04 15:45:05

Test Laboratory: Research In Motion Limited

Body-worn with Vertical Foam Holster; GSM 1900; High chan; Ambient temp. 24.3 deg cel.; Liquid temp. 22.8 deg. cel

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.57 \text{ mho/m}$; $\epsilon_r = 50.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(4.8, 4.8, 4.8); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 25 V/m; Power Drift = -0.005 dB

Maximum value of SAR (measured) = 1.59 mW/g

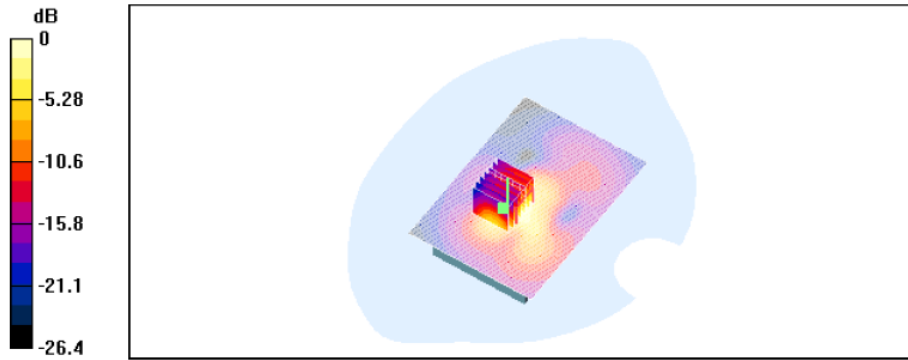
Peak SAR (extrapolated) = 3.22 W/kg

SAR(1 g) = 1.38 mW/g; SAR(10 g) = 0.702 mW/g


Unnamed procedure/Area Scan (101x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 25 V/m; Power Drift = -0.005 dB

Maximum value of SAR (interpolated) = 1.73 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		35(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 06/10/04 16:33:43

Test Laboratory: Research In Motion Limited

**Body-worn with Vertical Foam Holster; GSM 1900; High chan; BAT-03487-002 Sanyo battery;
Ambient temp. 24.0 deg cel.; Liquid temp. 22.6 deg. cel**

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.57 \text{ mho/m}$; $\epsilon_r = 50.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(4.8, 4.8, 4.8); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 21.2 V/m; Power Drift = -0.0 dB

Maximum value of SAR (measured) = 0.920 mW/g

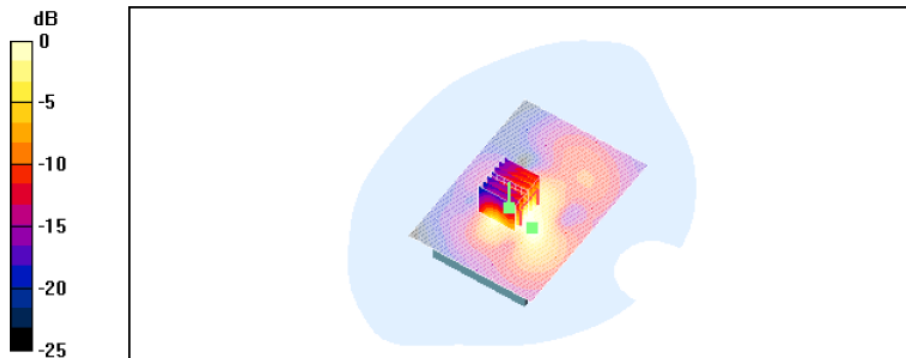
Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 0.812 mW/g; SAR(10 g) = 0.454 mW/g


Unnamed procedure/Area Scan (101x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 21.2 V/m; Power Drift = -0.0 dB

Maximum value of SAR (interpolated) = 0.980 mW/g



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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		36(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 06/11/04 09:35:12

Test Laboratory: Research In Motion Limited

Body-worn with Vertical Foam Holster; GSM 1900; High chan; BAT-06532-001 higher cap battery; Ambient temp. 24.3 deg cel.; Liquid temp. 22.8 deg. cel

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.57 \text{ mho/m}$; $\epsilon_r = 50.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(4.8, 4.8, 4.8); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 19.4 V/m; Power Drift = 0.0 dB

Maximum value of SAR (measured) = 0.856 mW/g

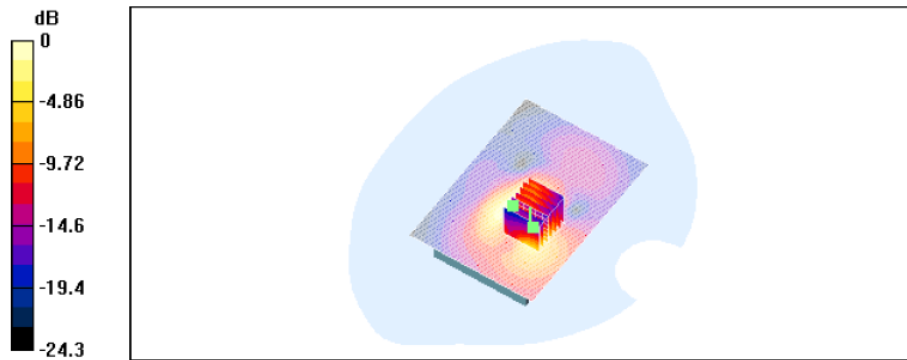
Peak SAR (extrapolated) = 2.03 W/kg

SAR(1 g) = 0.757 mW/g; SAR(10 g) = 0.410 mW/g

Unnamed procedure/Area Scan (101x141x1): Measurement grid: dx=10mm, dy=10mm


Reference Value = 19.4 V/m; Power Drift = 0.0 dB

Maximum value of SAR (interpolated) = 0.889 mW/g



0 dB = 0.889mW/g

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 RESEARCH IN MOTION	Document		Page
	Appendices for the BlackBerry 7290 Wireless Handheld Model No. RAP40GW test report		37(37)
Author Data	May 03 – 13 & June 08 - 10, 2004	Test Report No RIM-0086-0405-01	FCC ID: L6ARAP40GW

Page 1 of 1

Date/Time: 06/11/04 10:28:24

Test Laboratory: Research In Motion Limited

Body-worn with Vertical Foam Holster; Bluetooth ON; High chan; headset; Ambient temp. 24.2 deg cel.; Liquid temp. 22.9 deg. cel

DUT: BlackBerry Wireless Handheld; Type: Sample

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: M1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.57 \text{ mho/m}$; $\epsilon_r = 50.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1643; ConvF(4.8, 4.8, 4.8); Calibrated: 09/10/2003
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 19/08/2003
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.2 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 112

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

Reference Value = 20.2 V/m; Power Drift = -0.1 dB

Maximum value of SAR (measured) = 1.52 mW/g

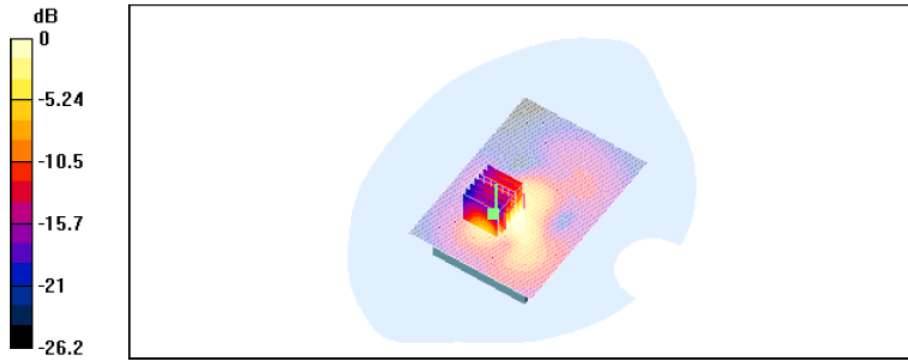
Peak SAR (extrapolated) = 3.05 W/kg

SAR(1 g) = 1.33 mW/g; SAR(10 g) = 0.665 mW/g

Unnamed procedure/Area Scan (101x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 20.2 V/m; Power Drift = -0.1 dB

Maximum value of SAR (interpolated) = 1.57 mW/g



0 dB = 1.57mW/g

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