

January 13, 2004

Diane Poole

Federal Communications Commission, Equipment Authorization Division Application Processing Branch 7435 Oakland Mills Road Columbia, MD 21045

Subject: Response to the FCC Correspondence Reference Number **26178** for clarification on RIM BlackBerry Wireless Handheld FCC ID L6ARAO30GN, 731 Confirmation Number **EA274470** 

Dear Diane:

The following addresses your inquiry Correspondence Reference Number 26178, dated January 07, 2004:

The device can be placed in the foam holsters with the display out. However, the intended usage of the holsters is that the handheld be slid into the holster with keyboard side facing the user (facing the belt-clip) while in the holster. This positioning has the benefit of protecting the keypad and the large LCD from damage.

1.0 SAR result summary for body-worn configuration using Horizontal and Vertical foam holsters with display in / out configurations

Please refer to the SAR test report number: RIM-0073-0311-01, "SAR Compliance Test Report for foam holsters with BlackBerry Wireless Handheld Model RAO30GN", for the tissue simulating liquid's dielectric properties and Dipole Validation data.



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Mode	f (MHz)	Conducted Output Power (dBm)	Liquid Temp. (°C)	SAR, averaged over 1 g (W/kg) Vertical Holster	SAR, averaged over 1 g (W/kg) Horizontal Holster	SAR, averaged over 1 g with headset (W/kg) Vertical Holster	LCD display position
	824.20	32.1	22.2	0.90	0.91	-	out
GSM	836.80	32.0	22.1	1.04	1.03	-	out
850	848.80	31.9	22.2	1.15	0.88	1.03	out
	1850.20	30.4	22.2	1.15	0.87	0.93	out
PCS	1880.00	30.2	22.2	1.07	0.97	-	out
1900	1909.80	30.3	22.1	0.97	1.04	-	out
	824.20	-	-	-	-	-	in
GSM	*836.80	32.0	22.2	0.17	0.25	-	in
850	848.80	-	-	-	-	-	in
	1850.20	-	-	-	-	-	in
PCS	*1880.00	30.2	22.1	0.10	0.07	-	in
1900	1909.80	-	-	-	-	-	in

Table 1.0 SAR result summary for body-worn configuration using Horizontal and Vertical foam holsters

# 2.0 SAR plots for body-worn configuration using Horizontal and Vertical foam holsters with display out configuration

<sup>\*</sup> Supplement C: Middle channel testing is sufficient only if SAR < 3dB below limit see PN 02-1438



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Date/Time: 10/31/03 17:03:07

Test Laboratory: Research In Motion Limited

Ambient Temperature: 24.6 (°C); Liquid Temperature: 22.2 (°C)

DUT: BlackBerry Wireless Handheld Model RAO30GN; Type: Sample; Configuration: Bodyworn with Vertical Holster HDW-06620-000, back side facing the belt-clip

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

Medium: M1900 ( $\sigma = 1.535 \text{ mho/m}, \epsilon_r = 51.075, \rho = 1000 \text{ kg/m}^3$ )

Phantom section: Flat Section

# DASY4 Configuration:

- Probe: ET3DV6 SN1642; ConvF(4.9, 4.9, 4.9); Calibrated: 28/08/2003
- 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, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

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

Reference Value = 20.7 V/m Power Drift = -0.06 dB

Maximum value of SAR = 1.32 mW/g

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

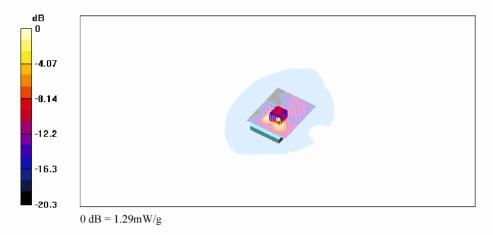
Peak SAR (extrapolated) = 1.85 W/kg

SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.638 mW/g

Reference Value = 20.7 V/m

Power Drift = -0.06 dB

Maximum value of SAR = 1.29 mW/g



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Date/Time: 11/03/03 14:27:31

Date/Time: 11/03/03 14:27:31

Test Laboratory: Research In Motion Limited

Ambient Temperature: 24.4 (°C); Liquid Temperature: 22.2 (°C)

DUT: BlackBerry Wireless Handheld Model RAO30GN; Type: Sample; Configuration: Bodyworn with Vertical Holster HDW-06620-000, back side facing the belt-clip

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: M 835 ( $\sigma = 0.97 \text{ mho/m}$ ,  $\varepsilon_r = 53.15$ ,  $\rho = 1000 \text{ kg/m}^3$ )

Phantom section: Flat Section

### DASY4 Configuration:

- Probe: ET3DV6 SN1642; ConvF(6.4, 6.4, 6.4); Calibrated: 28/08/2003
- 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, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Unnamed procedure/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 31.6 V/m

Power Drift = -0.05 dB

Maximum value of SAR = 1.21 mW/g

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

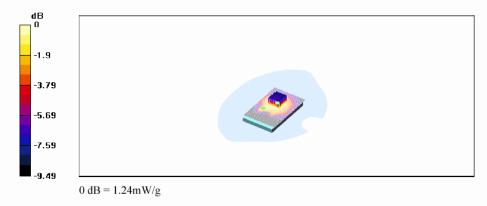
Peak SAR (extrapolated) = 1.62 W/kg

SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.792 mW/g

Reference Value = 31.6 V/m

Power Drift = -0.05 dB

Maximum value of SAR = 1.24 mW/g



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Date/Time: 11/04/03 14:04:03

Test Laboratory: Research In Motion Limited

Ambient Temperature: 24.9 (°C); Liquid Temperature: 22.2 (°C)

DUT: BlackBerry Wireless Handheld Model RAO30GN; Type: Sample; Configuration: Bodyworn with Horizontal Holster HDW-06619-000, back side facing the belt-clip

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium: M 835 ( $\sigma = 0.97 \text{ mho/m}, \epsilon_r = 53.8, \rho = 1000 \text{ kg/m}^3$ )

Phantom section: Flat Section

# DASY4 Configuration:

- Probe: ET3DV6 SN1642; ConvF(6.4, 6.4, 6.4); Calibrated: 28/08/2003
- 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, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

Unnamed procedure/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 33.3 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 1.12 mW/g

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

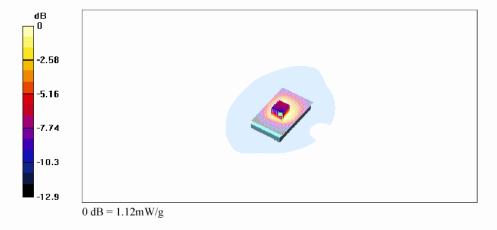
Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.703 mW/g

Reference Value = 33.3 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 1.12 mW/g



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Date/Time: 11/02/03 14:22:22

Test Laboratory: Research In Motion Limited

Ambient Temperature: 24.5 (°C); Liquid Temperature: 22.1 (°C)

DUT: BlackBerry Wireless Handheld Model RAO30GN; Type: Sample; Configuration: Bodyworn with Horizontal Holster HDW-06619-000, back side facing the belt-clip

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: M1900 ( $\sigma = 1.535 \text{ mho/m}, \epsilon_r = 51.075, \rho = 1000 \text{ kg/m}^3$ )

Phantom section: Flat Section

# DASY4 Configuration:

- Probe: ET3DV6 SN1642; ConvF(4.9, 4.9, 4.9); Calibrated: 28/08/2003
- 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, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 116

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

Reference Value = 14.5 V/m Power Drift = -0.02 dB

Maximum value of SAR = 1.19 mW/g

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

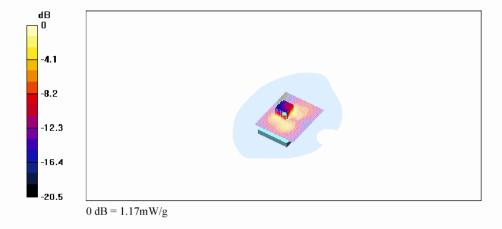
Peak SAR (extrapolated) = 2.21 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.532 mW/g

Reference Value = 14.5 V/m

Power Drift = -0.02 dB

Maximum value of SAR = 1.17 mW/g



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Please do not hesitate to contact the undersigned should you require additional information or have any questions.

Yours truly,

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