

March 19, 2003

Federal Communications Commission
Equipment Approval Services
7435 Oakland Mills Road
Columbia, MD 21046
Attn: Diane Poole

**SUBJECT: M/A-COM Private Radio Systems, Inc.
FCC ID: OWDTR-0013-E
731 Confirmation No.: EA808738
Correspondence No.: 24965**

Dear Diane,

On behalf of M/A-COM Private Radio Systems, Inc. is our response to your e-mail dated March 17, 2003 requesting additional information for the subject application.

1. Please find attached SAR over time data and scaled SAR values to account for the initial twenty-second power droop of the EUT. The SAR over time evaluation was performed over a 60 second transmit period at the worst-case SAR configuration and shows the droop in power from start of test to a period of twenty-seconds. The twenty-second power droop was calculated as a drift value of 0.27 dBm and subsequently added to the initial SAR values as shown in the attached data tables.

If you have any further questions or comments concerning the above, please contact the undersigned.

Sincerely,



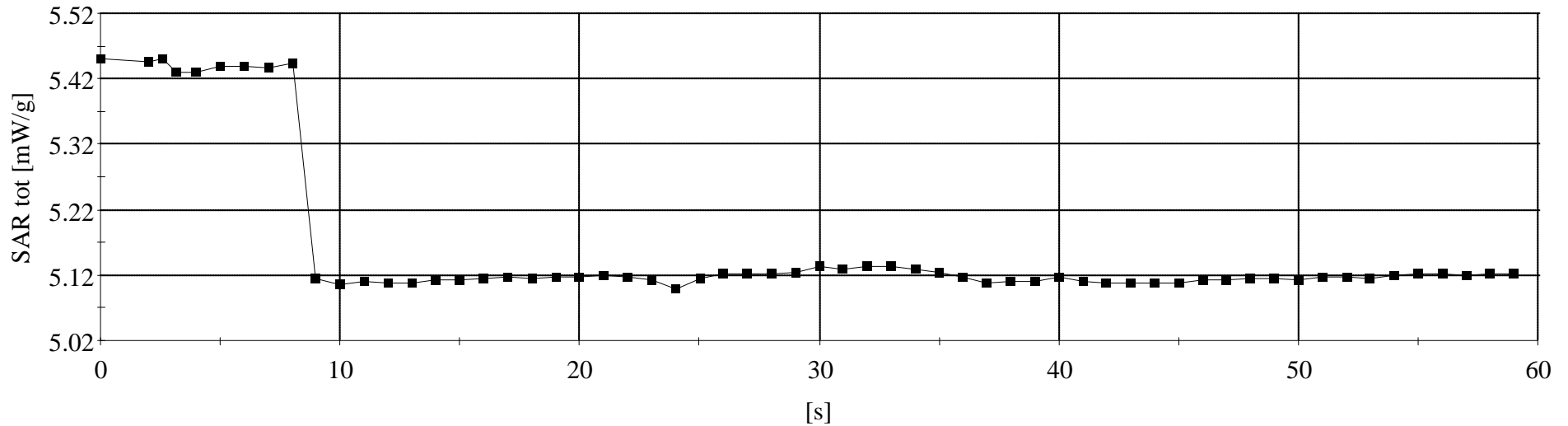
Jonathan Hughes
General Manager
Celltech Labs Inc.

M/A-COM PRS INC. FCC ID: OWDTR-0018-E

Small Planar Phantom; Planar Section
Probe: ET3DV6 - SN1590; ConvF(9.10,9.10,9.10); Crest factor: 1.0
150 MHz Muscle: $\sigma = 0.82$ mho/m $\epsilon_r = 59.2$ $\rho = 1.00$ g/cm³

SAR VERSUS TIME

Body-Worn SAR with Metal Belt-Clip (KRY1011647/1)
(1.1cm Belt-Clip Separation Distance)
Portable VHF PTT Radio Transceiver Model: P7100(IP)
Helical Coil Antenna (KRE1011219/2)
NiMH Battery (BKB191210/4/6)
Continuous Wave Mode
Mid Channel [155.00 MHz]
Conducted Power: 37.68 dBm
Ambient Temp. 23.3°C; Fluid Temp. 23.5°C
Date Tested: March 18, 2003



4.0 MEASUREMENT SUMMARY

The measurement results were obtained with the EUT tested in the conditions described in this report. Detailed measurement data and plots showing the maximum SAR location of the EUT are reported in Appendix A.

FACE-HELD SAR MEASUREMENT RESULTS											
Freq. (MHz)	Channel	Test Mode	Conducted Pwr. (dBm)		Antenna Part No.	Accessory Type	Battery Type	Phantom Section	Separ. Dist. (cm)	Scaled SAR 1g (W/kg)	
			Before	After						100% Duty Cycle	50% Duty Cycle
155.00	Mid	CW	37.68	37.60	KRE1011219/2	None	NiMH	Planar	2.5	1.64	0.820
155.00	Mid	CW	37.68	37.58	KRE1011219/2	None	NiCD	Planar	2.5	2.13	1.07
136.00	Low	CW	37.68	37.51	KRE1011219/1	None	NiCD	Planar	2.5	0.133	0.0665
174.00	High	CW	37.40	37.26	KRE1011219/3	None	NiCD	Planar	2.5	0.328	0.164
155.00	Mid	CW	37.68	37.52	KRE1011219/2	SM with Ant.	NiMH	Planar	2.5	1.95	0.975
155.00	Mid	CW	37.68	37.53	KRE1011219/2	SM with Ant.	NiCD	Planar	2.5	2.49	1.25
136.00	Low	CW	37.68	37.68	KRE1011219/1	SM with Ant.	NiCD	Planar	2.5	0.716	0.358
174.00	High	CW	37.40	37.30	KRE1011219/3	SM with Ant.	NiCD	Planar	2.5	1.16	0.580
ANSI / IEEE C95.1 1992 - SAFETY LIMIT BRAIN: 8.0 W/kg (averaged over 1 gram) Spatial Peak - Controlled Exposure / Occupational											
Test Date(s)	08/22/02			r (Kg/m³)			1000				
Measured Mixture Type	150MHz Brain			Relative Humidity			48 %				
Dielectric Constant	Target		Measured		Atmospheric Pressure			101.7 kPa			
	52.3 (+/- 5%)		53.3								
Conductivity	Target		Measured		Fluid Temperature			23.5 °C			
	0.76 (+/- 5%)		0.77								
Ambient Temperature	23.3 °C			Fluid Depth			≥ 15 cm				

Abbreviation(s): SM = Speaker-Microphone

MEASUREMENT SUMMARY (Cont.)

BODY-WORN SAR MEASUREMENT RESULTS												
Test Date	Freq. (MHz)	Chan	Test Mode	Conducted Pwr. (dBm)		Antenna Part No.	Accessory Type	Battery Type	Phantom Section	Access. Separ. Dist. (cm)	Scaled SAR 1g (W/kg)	
				Before	After						100% Duty Cycle	50% Duty Cycle
8/21/02	155.00	Mid	CW	37.68	37.64	KRE1011219/2	SM with Ant.	NiMH	Planar	1.3	3.61	1.81
8/21/02	155.00	Mid	CW	37.68	37.63	KRE1011219/2	SM with Ant.	NiCD	Planar	1.3	4.00	2.00
8/21/02	136.00	Low	CW	37.68	37.66	KRE1011219/1	SM with Ant.	NiCD	Planar	1.3	2.50	1.25
8/21/02	174.00	High	CW	37.40	37.37	KRE1011219/3	SM with Ant.	NiCD	Planar	1.3	1.15	0.575
8/21/02	155.00	Mid	CW	37.68	37.60	KRE1011219/2	LC with BL	NiMH	Planar	1.7	2.44	1.22
8/21/02	155.00	Mid	CW	37.68	37.56	KRE1011219/2	LC with BL	NiCD	Planar	1.7	2.62	1.31
8/21/02	136.00	Low	CW	37.68	37.53	KRE1011219/1	LC with BL	NiCD	Planar	1.7	0.512	0.256
8/21/02	174.00	High	CW	37.40	37.23	KRE1011219/3	LC with BL	NiCD	Planar	1.7	0.526	0.263
8/21/02	155.00	Mid	CW	37.68	37.58	KRE1011219/2	LC w/ BL & S	NiMH	Planar	4.5	1.56	0.780
8/21/02	155.00	Mid	CW	37.68	37.52	KRE1011219/2	LC w/ BL & S	NiCD	Planar	4.5	1.62	0.810
8/21/02	136.00	Low	CW	37.68	37.53	KRE1011219/1	LC w/ BL & S	NiCD	Planar	4.5	0.386	0.193
8/21/02	174.00	High	CW	37.40	37.26	KRE1011219/3	LC w/ BL & S	NiCD	Planar	4.5	0.322	0.161
8/21/02	155.00	Mid	CW	37.68	37.56	KRE1011219/2	NC w/ BL & S	NiMH	Planar	4.0	1.85	0.925
8/21/02	155.00	Mid	CW	37.68	37.54	KRE1011219/2	NC w/ BL & S	NiCD	Planar	4.0	1.95	0.975
8/21/02	136.00	Low	CW	37.68	37.57	KRE1011219/1	NC w/ BL & S	NiCD	Planar	4.0	0.149	0.0745
8/21/02	174.00	High	CW	37.40	37.27	KRE1011219/3	NC w/ BL & S	NiCD	Planar	4.0	0.262	0.131
8/30/02	155.00	Mid	CW	37.68	37.68	KRE1011219/2	Metal BC	NiMH	Planar	1.1	5.28	2.64
8/30/02	155.00	Mid	CW	37.68	37.68	KRE1011219/2	Metal BC	NiCD	Planar	1.1	4.90	2.45
8/30/02	136.00	Low	CW	37.68	37.68	KRE1011219/1	Metal BC	NiMH	Planar	1.1	0.977	0.489
8/30/02	174.00	High	CW	37.40	37.31	KRE1011219/3	Metal BC	NiMH	Planar	1.1	0.906	0.453
8/30/02	155.00	Mid	CW	37.68	37.52	KRE1011219/2	BL & S	NiMH	Planar	3.5	2.31	1.16
8/30/02	155.00	Mid	CW	37.68	37.64	KRE1011219/2	BL & S	NiCD	Planar	3.5	2.79	1.40
8/30/02	136.00	Low	CW	37.68	37.68	KRE1011219/1	BL & S	NiCD	Planar	3.5	0.329	0.165
8/30/02	174.00	High	CW	37.40	37.34	KRE1011219/3	BL & S	NiCD	Planar	3.5	0.287	0.144

ANSI / IEEE C95.1 1992 - SAFETY LIMIT
BODY: 8.0 W/kg (averaged over 1 gram)
Spatial Peak - Controlled Exposure / Occupational

Measured Mixture Type	150MHz Body		Date	08/21/02	08/30/02
Dielectric Constant	Target	Measured	Relative Humidity	73 %	
	61.9 (+/- 5%)	08/21/02		08/30/02	Atmospheric Pressure
		61.1	60.7		
Conductivity	Target	Measured	Fluid Temperature	23.3 °C	
	0.80 (+/- 5%)	08/21/02		08/30/02	Fluid Depth
		0.81	0.79		
Ambient Temperature	08/21/02	08/30/02	r (Kg/m ³)	1.000	
	23.1 °C	23.3 °C			1.000

Abbreviations: SM = Speaker-Microphone BC = Belt-Clip
 BL = Belt-Loop S = Swivel
 LC = Leather Case NC = Nylon Case

150MHz EUT Evaluation (Body)

Measured Fluid Dielectric Parameters (Muscle)

March 18, 2003

Frequency	ϵ'	ϵ''
50.000000 MHz	64.3351	273.3254
60.000000 MHz	62.7820	230.9322
70.000000 MHz	62.7746	197.8844
80.000000 MHz	62.0660	174.7283
90.000000 MHz	61.6048	156.3682
100.000000 MHz	61.2529	141.8185
110.000000 MHz	60.7778	129.7140
120.000000 MHz	60.1038	120.0354
130.000000 MHz	59.9684	111.0100
140.000000 MHz	59.8405	103.9342
150.000000 MHz	59.1961	97.9334
160.000000 MHz	58.9131	92.5214
170.000000 MHz	58.4440	87.9704
180.000000 MHz	58.2674	83.6645
190.000000 MHz	57.9028	79.8838
200.000000 MHz	57.5985	76.4489
210.000000 MHz	57.1815	73.4648
220.000000 MHz	57.0086	70.8572
230.000000 MHz	56.7172	68.1726
240.000000 MHz	56.3318	65.8739
250.000000 MHz	56.0035	63.8006