

> 3. Section 6.2 (3) describes muscle tissue, please clarify with respect to the
 > actual tissue material used in the SAR tests.
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We in fact did use high frequency (1-2.5 GHz) brain simulation tissue. We inadvertently missed changing one “muscle” reference. This problem will be eliminated in the future by not specifically referring to the type of tissue in the report.

Three additional errors relating to the tissue were discovered:

- The recipe in Appendix D (page 17) shows the 835 MHz proportions. These should read 45.3, 54.3, 0.0, 0.3 and 0.1% respectively.
- The RF Power axis of the chart on page 20 is not correct even though the vertical values for both sets of data presented are. We have no explanation for this odd occurrence as we could not reproduce it (the data in the table above the chart is correct).
- The data ranges for the last 3 calculations above the “Tissue Conversion Factor” did not include all the data. They only extend only extended down to 4.29 W while the “Voltage Slope” range included all the measurements.

The correct data, analysis (Table 1) and chart (Figure 9) are shown on the following page:

1624 MHz Data (Heike & Tony) BRAIN

RF Power			Ch0	Ch1	Ch2	delta T (30 sec)	Sum Vi/Ei	Thermal SAR
W	dBm	R&S	uV	uV	uV	deg. C		W/kg
0.698232404	28.44	-12.82	3411	1541	474	0.0674	6895.15	6.23
0.891250938	29.5	-11.76	4478	1895	684	0.0818	8974.65	7.57
1.081433951	30.34	-10.92	5474	2080	1011	0.1088	10907.4	10.06
1.380384265	31.4	-9.86	6875	2529	1323	0.1226	13665.7	11.34
1.733803998	32.39	-8.87	8472	3076	1831	0.1504	17052.5	13.91
2.187761624	33.4	-7.86	10156	3662	2295	0.1805	20541.5	16.70
2.722701308	34.35	-6.91	11621	4224	2783	0.2114	23751.4	19.55
3.443499308	35.37	-5.89	14233	5176	3418	0.2491	29105.5	23.04
4.285485204	36.32	-4.94	16722	6128	4070	0.2918	34324.2	26.99
5.432503315	37.35	-3.91	18799	6958	4687	0.357	38818.2	33.02
6.309573445	38	-3.26	22559	8447	5711	0.4161	46815.5	38.49
7.550922277	38.78	-2.48	26074	10254	6787	0.4243	54959.4	39.25
9.616122784	39.83	-1.43	30249	12012	8130	0.5118	64237.8	47.34

Directional Coupler factor **21.26** dB (Asset 100251 cal file data (Janusz, 21 Jul 96))
 Additional inline attenuation **20** dB

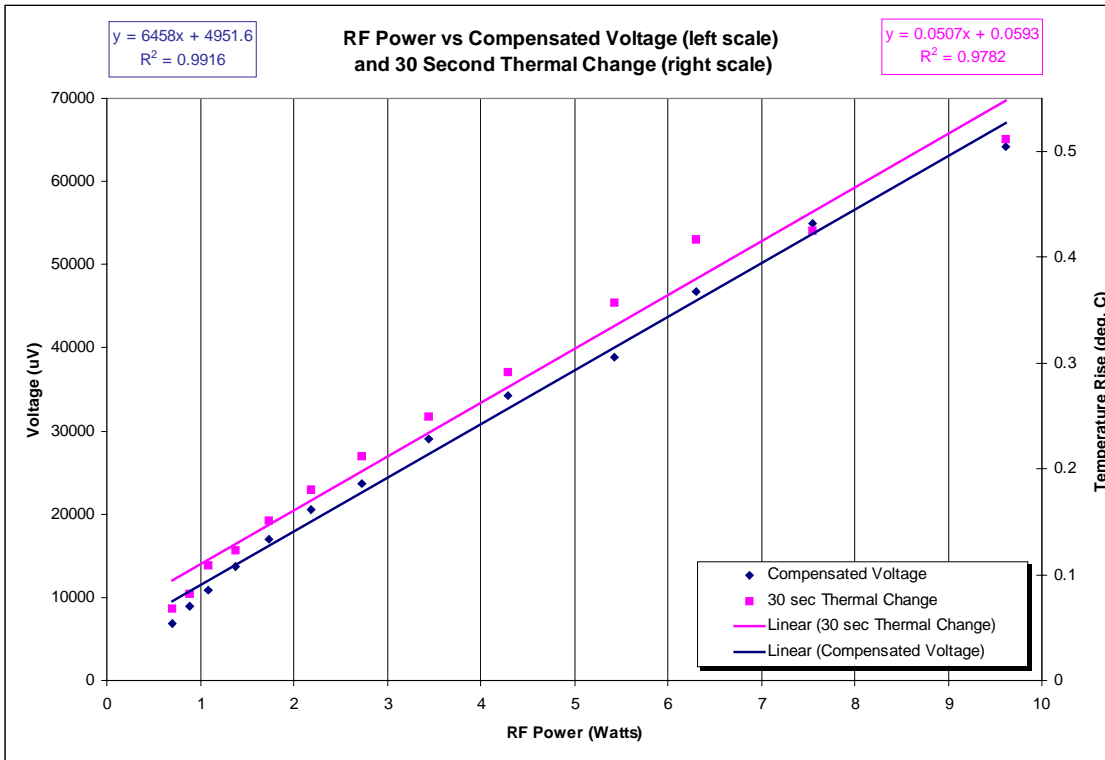
Sensitivity (e) **0.52** **0.54** **0.51** - Sensor Sensitivity in mV/(mW/cm²)
 $\eta = 1.50 e$ 0.78 0.81 0.765

Density 1.3 g/cm³ 1300 kg/m³ - Marcin, summer 97
 Conductivity **15.1** mS/cm 1.51 S/m - Heike 1-Mar-99
 Heat Capacity (c) 2.775 J/C/g 2775 J/C/kg - average of Balzano (2.7) and Kuster (2.85) values
 Exposure Time 30 seconds 30 seconds
 Slope of Measure Voltage (m_v) 6457.95 uV/W 0.00646 V/W
 - standard error or m_v 178.835 uV/W 0.00018 V/W 2.8%
 Slope of Measure Temp Change (m_T) 0.05074 C/W 0.05074 C/W
 - standard error or m_T 0.00228 C/W 0.00228 C/W 4.5%

Tissue Conversion Factor (γ)	5.6
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Table 1.

Figure 9.



The effect of this correction would be to reduce the reported maximum 1g SAR from 0.273W/kg to 0.224W/kg, i.e. one seventh of the 1.6W/kg limit.