

**Addendum to the Report**

SAR COMPLIANCE TESTING OF 3 COM  
PALM VII WIRELESS PDA

FINAL TECHNICAL REPORT

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### **Addendum to the Report**

#### **SAR COMPLIANCE TESTING OF 3 COM**

#### **PALM VII WIRELESS PDA**

As suggested by Mr. Kwok Chan of FCC, we have determined the SAR distributions and the peak 1-g SARs for the 90° and 135° positions of the antenna for placement of the blade antenna in touching contact against the planar box phantom used in the previously submitted report dated April 28, 1998.

The photographs of the 3 COM Palm VII Wireless PDA (FCCID# DF63C80500) placed under the phantom model for 90° and 135° positions are shown in Fig. 1. It should be noted that the wireless PDA is propped up with Styrofoam frames. Since the photographs of the PDA are taken through the transparent brain-simulant fluid, there is a streak and a glare caused by reflections from the surface of fluid.

The SAR distributions obtained for the 90° and 135° placements of the antenna are given in Tables A and B respectively. The peak 1-g SARs are 0.457 and 0.308 W/kg for 90° and 135° positions of the antenna, respectively.

Table A. **Antenna orientation of 90** (see Fig. Aa). **The SARs measured for the 3 Com Palm VII Wireless PDA for mode 1 using 34.4 dBm (2.75 W) pulses with a 7% duty cycle.** Estimated time-averaged radiated power of 192.8 mW. The SARs in W/kg are measured with a step size of 2 mm for the highest SAR region of the model.

$$\mathbf{1-g SAR} = 0.457 \text{ W/kg}$$

**a. At depth of 1 mm**

0.726	0.657	0.750	0.774	0.664
0.666	0.797	0.769	0.802	0.730
0.364	0.774	0.798	0.649	0.413
0.793	0.363	0.804	0.650	0.274
0.802	0.358	0.804	0.769	0.740

**b. At depth of 3 mm**

0.579	0.554	0.591	0.594	0.548
0.540	0.588	0.606	0.592	0.577
0.380	0.609	0.627	0.538	0.385
0.585	0.384	0.631	0.539	0.339
0.590	0.381	0.631	0.605	0.584

**c. At depth of 5 mm**

0.449	0.458	0.457	0.451	0.449
0.433	0.429	0.469	0.431	0.448
0.377	0.472	0.487	0.442	0.357
0.427	0.381	0.489	0.443	0.372
0.429	0.380	0.490	0.468	0.456

**d. At depth of 7 mm**

0.339	0.369	0.350	0.344	0.369
0.343	0.318	0.359	0.319	0.345
0.355	0.361	0.377	0.359	0.327
0.317	0.356	0.379	0.360	0.374
0.317	0.356	0.380	0.358	0.356

**e. At depth of 9 mm**

0.247	0.286	0.269	0.274	0.308
0.270	0.256	0.276	0.256	0.266

0.315	0.278	0.299	0.289	0.296
0.256	0.306	0.300	0.290	0.344
0.256	0.307	0.301	0.275	0.284

Table B. **Antenna orientation of 135** (see Fig. Ab). **The SARs measured for the 3 Com Palm VII Wireless PDA for mode 1 using 34.4 dBm (2.75 W) pulses with a 7% duty cycle.** Estimated time-averaged radiated power of 192.8 mW. The SARs in W/kg are measured with a step size of 2 mm for the highest SAR region of the model.

$$\mathbf{1-g\ SAR = 0.308\ W/kg}$$

**a. At depth of 1 mm**

0.112	0.463	0.408	0.132	0.452
0.458	0.570	0.190	0.523	0.442
0.263	0.592	0.585	0.503	0.198
0.554	0.211	0.612	0.555	0.415
0.643	0.559	0.503	0.616	0.291

**b. At depth of 3 mm**

0.208	0.393	0.370	0.193	0.354
0.380	0.424	0.242	0.409	0.375
0.244	0.406	0.412	0.396	0.242
0.403	0.233	0.457	0.439	0.381
0.461	0.440	0.423	0.434	0.278

**c. At depth of 5 mm**

0.262	0.326	0.326	0.227	0.278
0.315	0.313	0.263	0.316	0.311
0.227	0.270	0.286	0.308	0.261
0.292	0.245	0.337	0.344	0.339
0.323	0.343	0.353	0.300	0.257

**d. At depth of 7 mm**

0.274	0.262	0.277	0.234	0.224
0.263	0.236	0.256	0.246	0.250
0.210	0.184	0.205	0.237	0.254
0.220	0.247	0.254	0.269	0.290
0.231	0.268	0.293	0.216	0.228

**e. At depth of 9 mm**

0.244	0.200	0.222	0.213	0.193
0.224	0.193	0.219	0.197	0.192

0.194	0.148	0.171	0.185	0.221
0.188	0.237	0.208	0.216	0.234
0.183	0.214	0.243	0.179	0.190

(a)

(b)

Fig. A. Photographs of the 3 Com Palm VII Wireless PDA placed with blade antenna in touching contact against the bottom of the planar box phantom.

a. With antenna at a slant angle of  $90^\circ$ .

- b. With antenna at a slant angle of  $135^\circ$  relative to the chassis of the PDA.