

-----Original Message-----

From: P.Cardinal@aprel.com [mailto:P.Cardinal@aprel.com]

Sent: Friday, September 08, 2000 4:46 PM

To: EUSMSF@am1.ericsson.se

Cc: K.Maclean@Aprel.com; dave.foust@com-netericsson.com;

EUSSTMF@am1.ericsson.se; bclavier@rheintech.com

Subject: RE: PANTHER 300P SAR TESTING MEASUREMENT PROCEDURE USING  
CORRECT BODY TISSUE LIQUIDS

Hello Mike,

I was out of the office yesterday and had not fully digested the information in the e-mail when you phoned earlier this afternoon.

On rereading the FCC RF safety issue #4, I'm sure that the FCC has simply misunderstood the information presented in Appendix C. The measurements for the Panther were indeed performed with 450-470MHz tissue dielectric parameters, not 835MHz dielectric parameters. Also, our equipment was calibrated for this frequency range.

Since we have one brain and one muscle tissue that we use below 1GHz, we have to pick a frequency at which it will be maintained to the +/-5% deviation from the dielectric constant that is expected. It is impossible to meet the +/- 5% requirement on all frequencies at the same time. The frequency at which we have chosen to maintain the tissue parameters is 835MHz. Consequently, the first table in both reports at the bottom on the first page show the dielectric parameters at 835MHz to show that the tissue is within the required +/- 5% and the second table shows the dielectric parameters at 450-470MHz used for the Panther testing. The supporting tables and charts that follow even indicate 470 MHz for the dielectric parameter calibration (performed immediately before your measurements at the center of the band of your device's operation) and 450MHz for the tissue conversion factor (performed once a year). Note that one chart is mislabelled - the tissue dielectric parameter chart for the face testing shows 450MHz in the title but should show 470MHz. You can look at the pdf files and see this for yourself quickly enough.

Therefore, I do not think that this relates to the issue I raised with you on the phone earlier today, namely that our 450-470MHz tissue parameters are too far from some unknown set of parameters to which the FCC wants us to aim. I have called Kwok Chan and left voicemail for him to contact me on this latter issue.

Paul

> -----Original Message-----

> From: Michael Fulk (EUS) [mailto:EUSMSF@am1.ericsson.se]

> Sent: Thursday, September 07, 2000 10:45 AM

>

> Dr. Cardinal:

>

> \*\*\*URGENT\*\*\* \*\*\*URGENT\*\*\* \*\*\*URGENT\*\*\* \*\*\*URGENT\*\*\* \*\*\*URGENT\*\*\*

> \*\*\*URGENT\*\*\* \*\*\*URGENT\*\*\*

>  
> Issue #4 is of the utmost concern. If I understand correctly,  
> what the FCC  
> is stating is that the Panther 300P UHF-M split (450-488 MHz)  
> SAR tests  
> performed at Aprel Labs on June 22 & 23 are invalid because  
> the muscle &  
> brain tissue liquids used are appropriate for the 800 MHz  
> band, but not  
> appropriate for the UHF band. Hence, the FCC is stating that  
> the SAR tests  
> would have to be re-run using the correct liquids. The FCC is  
> also asking  
> for Aprel Labs to verify that the e-field probes were  
> properly calibrated  
> for this 450-488 MHz band. (I assume they were.)  
>  
> Kind regards,  
>  
> Mike Fulk  
> 9/7/2000  
>  
> -----Original Message-----  
> From: oetech@fccsun07w.fcc.gov [mailto:oetech@fccsun07w.fcc.gov]  
> Sent: Friday, September 01, 2000 2:07 PM  
> To: eusmsf@am1.ericsson.se  
> Subject: RF safety only.  
>  
>  
> To: Michael Fulk, Com-Net Ericsson Critical Radio  
> Systems, Inc.  
> From: Joe Dichoso  
> jdichoso@fcc.gov  
> FCC Application Processing Branch  
>  
> Re: FCC ID OWDTR-0003-A  
> Applicant: Com-Net  
> Ericsson Critical  
> Radio Systems, Inc.  
> Correspondence Reference Number: 15883  
> 731 Confirmation Number: EA98449  
> Date of Original E-Mail: 09/01/2000  
>  
>  
> Please address the following RF safety issues. Place your  
> reply in the RF  
> exposure info folder. A technical review is pending.  
>  
> Ericsson EA 98449 -  
>  
> 4. The tissue dielectric parameters specified, measured and  
> reported in the  
> SAR results for both head and body are at 835 MHZ. This is a  
> 450-488 MHZ  
> device. Please verify if the wrong tissue parameters were  
> used, if so, new

- > SAR results with correct tissue parameters must be submitted.
- > Otherwise,
- > please submit correct tissue dielectric measurement data and
- > composition of
- > ingredients used for the tissue materials. Please also verify if the
- > E-field probe calibration are correct for the operating
- > frequency of this
- > device.