

From: khpark@hctec.co.kr  
Sent: Tuesday, April 16, 2002 6:49 AM  
To: MikeKuo@CCSEMC.com  
Cc: KiSoo Kim(HCT); SWang@CCSEMC.com  
Subject: Fw: Hyundai Curitel Inc. FCC ID: PP4TX-30B, AN02T1884 -2/2-

Dear Mr. Kuo,

Thank you very much for your kind cooperations on reviewing our projects.

Please find the answer just below each questions for Hyundai Curitel Inc. FCC ID:PP4TX-30B, AN02T1884.

If you have any further questions or commnets, please do not hesitate to contact me.

Thanks.

Best Regards,

KiSoo Kim - HCT

P.S. : The attahced four(4) files will be sent seperately by twice.

>  
> ----- Original Message -----  
> From: Mike Kuo <MikeKuo@CCSEMC.com>  
> To: <kisookim@hctec.co.kr>  
> Cc: Scott Wang <SWang@CCSEMC.com>  
> Sent: Friday, April 12, 2002 8:41 AM  
> Subject: Hyundai Curitel Inc. FCC ID: PP4TX-30B, AN02T1884  
>  
>  
> > Hi Mr. Kim:  
> >  
> > The questions below are considered as final administrative and technical  
> > review based upon the new attachments submitted on 04/05/2002.  
> >  
> > SAR  
> > Question #1: For Your Information : While doing System Validation before  
> > Final SAR measurement, only use Head tissue to verify the system validation.  
> > In IEEE SCC-34/SC-2 P1528, as mentioned in section 7.3.2, the reference SAR  
> > values are for Head Tissue and not for Body Tissue. In addition, Page 13 of  
> > SAR report, you verified both Head and Body tissue during System Validation,  
> > however, you used Head conversion factor for Body Tissue.

==> We've made a mistake for using conversion factor for Body Tissue for Validaiion.

So, we've changed the conversion factor for correction.

Please find the changed plot on page #3 and #5 in the attached file  
(filename : ATT.Q(DIPOLE VALIDATION PLOTS).doc).

> >  
> > As indicated in your system verification tests, the measured SAR value

> > @835MHz are very close to the max. deviation (10%) allowed. This will  
> > result in measuring higher SAR value. Resulting in measuring higher SAR  
> > values have been verified via Sample Request Tests performed by CCS/TCB.  
> > Even though your measured SAR values are still within 10% allowable  
> > deviation, you may want to verify your liquid parameter for the future  
> > tests.  
> >  
> > Question #2: The dipole calibration report provided by the SPEAG, the  
> > calibration was done with 835MHz head liquid with 900MHz dipole conversion  
> > factor of 6.27. The measured lg SAR is 10.64mW/g which is over the 10% of  
> > target value ( 9.5mW/g@835MHz) specified in P1528. Please confirm with  
> > Dipole manufacturer for this non-compliance issues.

=> We've contacted SPEAG through DAYSTEC in Korea agency for getting the  
answer

on the above question #2.  
We will answer it as soon as possible.

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

From: Niels Kuster [mailto:kuster@speag.com]  
Sent: Tuesday, April 16, 2002 5:30 PM  
To: DYMSTEC  
Cc: Mike Kuo; sulser@speag.com; kisker@speag.com; pokovic@speag.com;  
bomholt@speag.com; pieper@itis.ethz.ch  
Subject: Re: Fw: 835 dipole validation data at Hyundai-CT

dear angela

i thought we had explained the issue during our wonderful stay in  
korea. please find below a summary:

- the value given in our calibration document are those for "System Performance Check" and not "System Validation" (see Chapter 7 of the IEEE 1528-200X document)
- "System Performance Check" ensures that all DASY systems around the globe measures within the margin given.
- since FCC has still not accepted "Advance Extrapolations" or "Boundary Effect Compensation", the values for "System Performance Check" are higher than those for "System Validation".
- as IEEE1528-200X will allow "Advance Extrapolations" or "Boundary Effect Compensation", the values for "System Performance Check" will become identical to those of "System Validation". DASY4 incorporates all these new features and provides superior precision unmatched by any competitor. (if any competitors claim to achieve a higher precision without boundary compensation, then they most likely calibrate the system not according to the document.)
- the values for the Hyundai D835-SN441 with "Advanced Extrapolation" are: 2.43 W/kg (1g), 1.60 W/kg (10g) and 3.58 for peak, i.e., well within the limits.

i hope this answers yours and mike's concern. if he needs any additional information, he shall not hesitate to contact me directly.

kind regards, niels kuster

> >

> > Question #3: Section 10.1 of SAR report, the measurement uncertainties are  
> > still listed as Extended Uncertainty. In my e-mail to you dated March 28, I  
> > have informed you that ISO guide terminology is Expanded uncertainty.  
> > Please make necessary correction and submit revised report.

==> We've contacted SPEAG through DAYSTEC in Korea agency for getting the answer

on the above question #3.

So, we've gotten the answer and changed the measurement Uncertainty result for correction.

Please find the changed data on page #15 in the attached file(filename : ATT.N(SAR REPORT).doc).

> >

> > Question #4: Page 1 of SAR report, the lowest TX frequency for PCS CDMA  
> > should be 1851.25MHz. Please make correction.  
> >

==> Please find the revised one on page #1 in the attached file(filename : ATT.N(SAR REPORT).doc).

> > Part 22/24 Portion:

> >

> > Question #5: Please provide the instrument settings used ( RBW/VBW) during  
> > ERP/EIRP output power measurement and radiated spurious emission  
> > measurement.

==> The instrument settings used ( RBW/VBW) during ERP/EIRP output power measurement and radiated spurious emission are as below ;

-. Below 1GHz : RBW 100KHz, VBW 300KHz

-. Above 1GHz : RBW 1MHz, VBW 3MHz

Please find the revised one on page #7 and #13 in the attached file(filename : ATT. C (RF REPORT).doc).

> >

> > Question #6: Page 30 -32 of Test plots, you provided CDMA power out spectrum  
> > plots, the output power listed in these plots are different than those value  
> > reported in the SAR report. Please explain.

==> We've checked and found that there were a little different on conducted power level between RF and SAR reports.

We thought that it was OK to use the conducted power plots in the RF report because it was a little higher than

one in the SAR report.(It was a more worst case for checking the other RF items)

The RF conducted power on the SAR report is going to use for reference for SAR testing for mass production.

> >

> > Question #7: Page 17-18 of Test plots, you provided PCS CDMA channel power  
> > spectrum plots, the output power listed in these plots are different than  
> > those value reported in the SAR report. Please explain.

=> We've checked and found that there were a little different on conducted  
power level between RF and SAR reports.

We thought that it was OK to use the conducted power plots in the RF  
report because it was a little higher than

one in the SAR report.(It was a more worst case for checking the other  
RF items)

The RF conducted power on the SAR report is going to use for reference  
for SAR testing for mass production.

> >

> > Administrative Portion:

> >

> > Question #8" The highest body worn SAR value listed in the SAR information  
> > of user manual does not agree with measured value. SAR information listed  
> > 0.381W/kg, measured value:0.388W/kg. Please provide revised page.

> >

=> We've checked and found that there was a mistyped the SAR level in the  
User's manual.

We've revised the page for correction.

Please find the revised one on page #122 in the attached file(filename :  
TX-30B (4-8).pdf).

> > The items indicated above must be submitted before processing can continue  
> > on the above referenced application. Failure to provide the requested  
> > information within 60 days of the original e-mail date may result in  
> > application dismissal and forfeiture of the filing fee. Also, please note  
> > that partial responses increase processing time and should not be submitted.  
> > Any questions about the content of this correspondence should be directed to  
> > the e-mail address listed below the name of the sender.

> >

> > Best Regards

> >

> > Mike Kuo / TCB Certifier

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> > =====

> > Mike Kuo

> > Compliance Certification Services

> > 561F Monterey Road

> > Morgan Hill CA 95037

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