

<!doctype html public "-//w3c//dtd html 4.0 transitional//en">

<html>

Hi Alan

1528 basically states that the transverse distribution of the field in the solution corresponds to a fundamental mode having an exponential decay in the vertical axis (z-axis). 1528 also says that while a simple exponential is adequate for a conservative uncertainty analyses, a fourth order least-squares polynomial fit using the measured data provides a more appropriate result.

Please note that "SAR values required for computing the 1-g or 10-g SAR between the surface of the phantom and the closest measurable points must be determined by extrapolation.(1528)" This means the z-axis plot is an extrapolated exponential plot that is intended to show the results as you approach the phantom surface where data cannot be measured.

Please note that the plot provided as z-axis in the report is not an exponential plot and it does not properly indicate the transverse field decay between the surface of the phantom and the measured data points. I do not know what the plot provided represents, but the report is supposed to provide the extrapolated curve of the decay in the vertical axis (i.e. between the surface of the phantom and the closest measurable points). If I were to guess at what the plot provided is, I would say it is plotted data of supposedly measured SAR values with an incorrect assumption that the field approaches 0 as it approaches the surface of the phantom. This is not the case.

Please use the expected formula in 1528 to extrapolate the z-axis decay.

Please see IEEE1528 on z-axis extrapolation for a more precise example and instructions.

I hope this helps

Thanks

Dennis

alan_lane@adt.com.tw wrote:

<blockquote TYPE=CITE>

Dear Dennis,

Thanks for your help. Here is my reply.

2. The SAR test report should be a duplicate one. There must be something wrong. I will go back to check.

3.Regarding to the z-axis plot, I have to admit that I don't understand where the problem is. Can you please clearly point out the in-correct point ? I should go back to my SAR test engineer for the correction.

4. This is a 11g device. 54Mbps is provided under the turbo mode of OFDM.

But if the SNR is poor, the data rate will go back to 11Mbps of CCK. If you tell me that CW signal for SAR testing is not allowed for OFDM, then I will admit that I did the wrong testing, otherwise the question will be on the used power of the CW signal. Our solution is to measure the conducted power of both 11Mbps and 54Mbps. The CW power will be adjusted to the higher one for SAR testing. Normally, the output power for 11Mbps and 54Mbps will roughly be the same. But in this case, the 11Mbps one is a little bit higher.

Thank you.

Best Regards,

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