Chris Harvey

From: Thomas Cokenias [tom@tncokenias.org]
Sent: Thursday, June 08, 2006 4:33 PM
To: charvey-tcb@ccsemc.comcharvey-tcb@ccsemc.com
Subject: Further to Question 4, Alvarion Ltd., FCC ID: LKT-VL-53C, Assessment NO.: AN06T5745, Notice#1

Hi Chris,

Per our conversation today, this is to clarify that the power level setting in the test report for the 28 dBi antenna radiated emissions measurements was indeed higher than the maximum allowed by section 15.407(a)(2), which is -0.5 dBm. Alvarion recognizes this test error, and has prepared additional pages to be inserted in the installation manual which limit 10 MHz channel power to -1.0 dBm into
28 dBi antenna, a power level 0.5 dB below maximum allowed for this antenna.

The test report shows that the emissions from the 28 dBi antenna are well within the Part 15 limits, even though power input to the antenna was higher than allowed. Engineering judgement indicates that these radiated emissions would be even lower if the correct power setting were used.

best regards

Tom

> 4. This device has 3 different Channel Bandwidths, which must each be
> used along with the 3 available Antenna Gains to determine the Peak
> Power Limit, Peak Power Spectral Density Limits. This information
> does not seem to be clearly provided. For example:
> The maximum measured output power when the radio is configured as
> access unit is 14.3 dBm (27mW). In accordance with section 15.407
> (a)(2): for the band 5.25-5.35GHz, the peak transmit power shall not
> exceed the lesser of 250mW or 11 dBm+(10logB). The smallest measured
> emission bandwidth is 11.29MHz, which would equate to a Peak Power
> Limit of 21.5dBm. In 15.407(a)(2) also mentioned, if transmitting
> antenna of directional gain greater than 6 dBi are used, both the peak
> transmit power and the peak power spectral density shall be reduced by
> the amount in dB that the directional gain of the antenna exceeds 6
> dBi.
> Based upon section 4 of test report, the maximum of 28 dBi antenna
> gain is used with this unit, so the output power limits for 28 dBi
> antenna gain shall be 21.5 - (28-6) = -0.5dBm. The measured output
> power is over the limits. Same situation is also applied to Subscriber
> unit. Please review the output power and peak power spectral density
> in conjunction with the 26dB Bandwidths and antenna gains.
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