Helen Zhao

Subject: FW: ??: RE: ??: RE: ??: RE: ??: FW: Alpha Networks Inc., FCC ID: RRK2004090192-1, Assessment NO.: AN04T4387, Notice#1


WMP-A13 Module Approval Letter...


WMP-A13 Test Sup Photo (Part 1...

-----Original Message-----
From: ting@ccsemc.com.tw [mailto:ting@ccsemc.com.tw]On Behalf Of application@ccsemc.com.tw
Sent: Wednesday, December 29, 2004 4:50 PM
To: Helen Zhao
Cc: application@ccsemc.com.tw
Subject: ??: RE: ??: RE: ??: RE: ??: FW: Alpha Networks Inc., FCC ID: RRK2004090192-1, Assessment NO.: AN04T4387, Notice#1

Dear Helen,

Please refer to below for our reply.

Best Regards,
Ting

> -----Original Message-----
> From: Compliance Certification Services [mailto:hzhao@ccsemc.com]
> Sent: Tuesday, December 14, 2004 8:53 PM
> To: Helen Zhao
> Subject: Alpha Networks Inc., FCC ID: RRK2004090192-1, Assessment
> NO.:
> AN04T4387, Notice#1
>
> Question #1: The test report has two sets of antenna port conducted
> test data associated with two different types of antenna: 5dBi
> omni-antenna and 18dBi patch antenna. Please confirm with the antenna
> change, there are any software, firmware or hardware changes are
> involved. If the answer is YES, please indicate what kind of changes
> were made in the test report. If the answer is NO, please explain why
> antenna port conducted test needs to be repeated with antenna change.
>
> Ans. Yes, software or firmware or hardware changes were involved. The reason
> to perform conducted test with each antenna is because the different
> antenna type and antenna gain, especially for the two high gain
> antennas, the limit of output power or other related conducted tests,
> if transmitting antennas of directional gain greater than 6 dBi are
> used, both the maximum conducted output 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 per 15.407 specified.
> And also different output power may influence other test result, for
> example, bandedge or spurious emission test.
>
> ==> The test report has two sets of antenna port conducted test data
> associated with two different types of antenna: 5dBi omni-antenna and 18dBi

patch antenna. Please note antenna port conducted test is done when no antenna is connected. So the measurement should be irrelevant to antenna type or antenna gain. If the output power must be adjusted when different antenna is used, repeated test makes sense. But in that case, professional installation is required, then Full Modular approval is not applicable as profession installation is required (but Limited Modular Approval might be allowed for some cases). If you confirm the firmware (or software) change is necessary when different antenna is used, please add installation instruction as how to tune the power when different antanna is used, and properly document power settings associated with the antennas.

Ans. After confirmed with Alpha, they decided to change the full modular approval to limited modular approval and device will be restricted for professional installation. The setting instruction of output power with different antennas has been added in the section of 2.2 of OEM installation guide. Attached please find the revised OEM installation guide and modular request letter.

Question #2: The user manual does not contain restriction statement of the use of 5GHz radio, e.g. indoor use only for 5.15-5.25 band. Please revise the user manual accordingly.
Ans. The warning was stated in page 12 of user manual. Besides, to make more concisely, the warning has also been added in page 3 of user manual.

Question #3: The user manual indicated that the device has been tested to be colocated with AP (FCC ID: KA22002090027-1) please note only two out of three antennas have been tested with, please rephase the statement to list the antennas that have been tested with.
Ans. Revised as attached revised user manual.

Question #4: The 14dBi patch antenna was used for 5.15-5.35 GHz band testing only, while 18dBi patch antenna was used for 5.725-5.850 GHz band testing only, please explain when 14dBi patch antenna is installed, how the device works at 5.725-5.850 GHz band, and 18dBi patch antenna is installed, how the device works at 5.15-5.35 GHz bands.
Ans. When using 14dBi patch antenna, the device can only work in 5250-5350MHz, and 5725-5850MHz for 18dBi antenna only. So before placing on the market, the operating frequency may be set by software according to the antenna supplied. Such information has been added in the page 12 of user manual.

New question: Question #5: Page 3-9 of the Installation manual provided detailed instrunction on how to do software control including frequency range setting. Please note this kind of information can be provided to OEM integrator only, can not be provided to the end users. Please add some kind of statement into the

installation manual.
Ans. The installation manual is revised as "OEM Installation Guide"
as attached file.

New question: Question #6: Section 2.7 Regulatory Requirement (Page
17) of Installation Manual mentioned SAR: FCC Part 15.407(f), please
note this device is seeking modular approval, SAR is not applicable
here. Please remove it from the installation manual.
Ans. Revised as attached file.

New question: Question #7: Setup photos of colocation test show when
two high gain panel antennas were used, two panel antennas were
actually not placed at the same plane: one was perpendicular to the
other one, which prevented the receiver antenna from receiving the
maximum signals from two antennas. The test results thus does not
acurately reflect the real situation. Please explain.
Ans. According to the test procedure, the turntable shall be rotated
for 360 degrees to determine the position of maximum emission level,
so though the EUT antennas are set prependicular to one another, the
max signal still can be measured by the receiving antenna.
(See attached file: WMP-A13 UserMan revised1217.pdf)

==> Your receiving antenna might be able to get the maximum emission level from
one panel antenna when it was facing toward the receiveing antenna, but it
definately could not get the maximum emission level from the other panel antenna
since the other panel antenna was perpendicular to the receiving antenna at that
time,
vice verse. So your receiving antenna never caught the maximum emission level
from both antennas due to this placement, which makes your measurement inaccurate.
lease reconsider this situation.

New question: Question #8: Setup photos of colocation test show when two omni
antenna were used, they are not in the same direction (here I am not talking about z
plane),
actually two antennas are in two different planes that one is perpendicular to the other. Is
this specially designed? What for?

Ans. There is no special design for the antennas. We double check with
Engineering department and know that the two antennas are omni type and
have same characteristics at different direction (parallel or
perpendicular). Besides, two antennas' position will become perpendicular
to one another is because the design of screw. After screwed on, they then
become perpendicular.

Best Regards,
Helen Zhao

The items indicated above must be submitted before processing can
continue on the above referenced application. Failure to provide the
requested information within 30 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.

This e-mail transmission is confidential and intended solely for being reviewed by the recipient(s) identified above. If you are not an identified recipient, please ensure that this communication remains confidential and promptly return it to the sender. Please contact immediately by phone (Tel: 886-2-2299-9720) for any problem with this transmission, Thank you for your attention. << File: WMP-A13 Test Sup Photo (Part 15.247 DTS) Revised 1222.pdf >>

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