

Hi Steve,

Here are our answers for Atheros AP30(03U2012), AN03T3061. Pls kindly review the answers and issue the grant ASAP.

Thanks!

Claire

RT for project: AN03T3061

Question #1: User manual p2-7 p2-8 missing graphic

<Atheros Mike Green>: Pls see attached revision of user manual.

Question #2: Page 2-9 of operation manual stated, “Depending on firmware settings, the channel of operation may not be accessible and will be automatically determined depending on the current regulatory domain (i.e. country of operation)”. Recently, FCC had released a notice to TCB that user selectable regulatory domain is no longer allowed. Please provide what have been implemented on the AP firmware to prevent user from changing the regulatory domain?

<Atheros Mike Green>: I thought user selectable regulatory domain has never been allowed by FCC. This device has an EEPROM code programmed at the factory which locks the regulatory domain to the U.S. setting so that user cannot change via the user interface or any other means.

Question #3: User manual stated, “This device has been evaluated for compliance with FCC RF Exposure (SAR) limits”. But SAR report cannot be found, please clarify.

<Atheros Mike Green>: Pls see revised user manual, page B-3, attached.

Question #4: User manual stated “CAUTION: To ensure compliance with FCC RF exposure requirements, the antenna used for this device must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operated in conjunction with any other antenna or radio transmitter. But this device has a self co-located transmitter. Please modify users manual to reflect the actual situation.

<Atheros Mike Green>: I believe this statement to our users is appropriate (i.e. don't locate or modify this device so that it is used with any other transmitter device). But the term co-located seems to be at issue. Therefore, I have modified the user manual as attached. Pls see updated text on page B-3.

Question #5: Please explain how antenna info is qualified for confidentiality?

<Atheros Mike Green>: The antenna was designed by Atheros and we wish to protect our intellectual property per .459. These antenna performance specs are only provided to Atheros customers under Non Disclosure Agreement.

Question #6: Please explain why all tests were conducted with open chassis?

<Mike H.>The cover was not available during testing. It is constructed entirely of plastic therefore does not impact the test results.

Question #7: The supplied antenna info sheet doesn't list 2.4G Gain. Please update the data sheet.

<Mike H> New updated antenna data sheet attached.

Question #8:

Page 88 co-located power is not consistent with measured power. Please correct and update the report

The dominant transmitter is the 802.11a mode:

$P1 = 0.716 \text{ W}$ (0.125w?)

$G1 = 2.51$ (4?)

The non-dominant transmitter is the 802.11g mode:

$P2 = 0.637 \text{ W}$

$G2 = 1.41$ (1.5?)

The MPE calculations for colocated transmitters must be performed in linear terms so that the power densities of the two transmitters can be added correctly. The MPE calculations for the individual transmitters were expressed in logarithmic terms to make the calculations easier. Thus:

For the 2.4 GHz transmitter:

Power output of 28.04 dBm = 637 mW = 0.637 W linear

Antenna gain of 1.5 dBi = 1.41 linear

For the 5 GHz transmitter:

Power output of 28.55 dBm = 716 mW = 0.716 W linear

Antenna gain of 4 dBi = 2.51 linear

Question #9:

Please provide which channels and modes were used in co-location testing and why those channels and modes selected.

Various channels were investigated for colocation. The worst-case results are reported. For the dominant transmitter the worst case was the frequency and mode at which the highest peak output power was measured among all operational bands. For the non-dominant transmitter the worst case was the frequency and mode at which the highest peak output power was measured among the operational bands at which the second transmitter can operate, given the band to which the dominant transmitter is already tuned.

-For your info#: page 13 of test report has a typo, 226dB shall be 26dB.

7.1. EMISSION BANDWIDTH

§15.403 (c) Emission bandwidth. For purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 226 dB EMISSION down relative

-For your info#: 15.407(c) requirement to automatically discontinue transmission in case of absence of information or operational failure, 15.407(e) requirement for indoor operation and potential interference with MSS operations and 15.407(g) frequency stability requirements have been addressed in Theory of operation and user manual.

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

Steve Cheng
Compliance Certification Services
561F Monterey Road
Morgan Hill, CA 95037
Tel:(408)463-0885 x:119
Fax:(408)463-0888
scheng@ccsemc.com
<http://www.ccsemc.com>