

May 2003

Dear Customer,

We have provided typical questions and answers that represent in most cases technical opinions with justification in FCC and CE Requirements. The particulars of the product for certification must be considered with respect to the applicability of these questions and answers. Thus, we hope you find our updates valuable, and welcome your calls and or emails if you have any special needs or questions. Please call at 703-689-0368 or email us at mailto:multipoint@rheintech.com

Also, please see our newly revised website at www.rheintech.com for MultiPoint archives and other helpful information.

Contents

- 5 GHz Worldwide Band
- OFDM Testing Outside the Band
- Exclusion From Routine SAR Evaluation
- Worldwide Updates
- Contact Information

5 GHz Worldwide Band:

Question:

Please provide a summary of the applicability for unlicensed devices in the 5 GHz band. Note in some countries a license maybe required for use of these devices outdoors.

Response:

The US and EU have fairly regulated structures (FCC & R&TTE). Most of South America - will accept FCC report. Africa, Mid East, Eastern Europe, Russia, require ETSI/EN report. Market/Region: **US** Applicability: **5150-5250 MHz**, **5250-5350**, **MHz5725-5825 MHz**.

Market/Region: EU Applicability: 5150-5350 MHz & must also operate in 5470-5725 MHz. Hyperlan standard-not 802.11a Now allows 802.11a without TPC or DFS on a country-by-country basis

Market/Region: Eastern EU, Africa, Middle East Applicability: Currently no 5 GHz allocated in some countries- some awaiting results of WRC-03 conference next year Market/Region: Japan Applicability: 4.9-5.025 GHz, 5250-5350 MHz Std 33a and 66

Market/Region: China Applicability: No 5 GHz Band 5725-5825 MHz has been adopted 5150-5350 MHz under consideration Market/Region: Malaysia Applicability: No 5 GHz Band 5150 - 5350 MHz under consideration 5725-5850 MHz under consideration Market/Region: Korea Applicability: 5725- 5825 MHz, 5150-5350 MHz under consideration Market/Region: Hong Kong Applicability: 5725-5850 MHz, 5150-5350 MHz under consideration

OFDM Testing Outside the Band:

Question:

When testing an OFDM 5 GHz Unit with a normal frequency range is 5.15~5.35GHz only. But this system also can tune to 5.725~5.825GHz. When testing according to part 15.407 (b)(3) the limit is -17dBm/MHz in the 10MHz frequency range outside the 5.725~5.825GHz. Can the "Average" function be used to test? And also my RBW and VBW is both 1MHz. Can we use a smaller RBW and VBW for testing?

Response:

The out of band spurious emissions for the systems are required to be recorded in peak and not in average. In fact, the out of band spurious emissions for this measurement calls out an EIRP level in dBm/MHz

Out of band emissions can use the average limit below 1 GHz. Section 15.407(b)(4) refers to in band peak power and not out of band emissions.

Section (6) deals with spurious emissions. Though the reading must be recorded with a peak detector; under Section15.407 (b)(4) stipulates though a 1 MHz band width is required for this test, a lower resolution near the band edge may be used if necessary, provided the measured energy is integrated to show the total power over 1 MHz.

Exclusion from routine SAR evaluation:

Question:

This device is categorically exempted from Routine Environmental Evaluation per CFR 47 section 2.1093. What does this statement means?

Response:

This statement refers to intentional radiators that may produce Radio frequency hazard. When a rule part contains this statement, the FCC or TCB will not review the SAR and or MPE test report.

Worldwide updates:

FCC Update

UZOMA C. ONYEIJE TO SERVE AS LEGAL ADVISOR IN THE WIRELESS TELECOMMUNICATIONS BUREAU OFFICE OF THE BUREAU CHIEF

Washington, D.C. - John Muleta, Chief of the FCC's Wireless Telecommunications Bureau has announced that Uzoma Onyeije will serve in the Bureau Chief's Office as a Legal Advisor.

In his new position as Legal Advisor, Onyeije will advise the Bureau Chief and Deputies on wireless regulatory issues, including matters before the Commercial Wireless Division.

Prior his current appointment, Onyeije served as a Senior Attorney in the Commission's Wireline Competition Bureau's Competition Policy Division. He joined the FCC in March 2001. Prior to joining the Commission, Onyeije served as an associate at Mintz, Levin, Cohn, Ferris, Glovsky & Popeo, specializing in telecommunications policy and transactions, and was an associate at Wiley, Rein & Fielding. Onyeije also served as an adjunct law professor at the George Washington University.

Onyeije received his J.D. *cum laude* from the Howard University School of Law, and a Bachelor of .Science degree from Oakwood College.for wireless broadband access. <u>www.fcc.gov</u>

Australia Update

NOTIFICATION OF VARIATION OF RADIOCOMMUNICATIONS CLASS LICENCE

Notice is given that the Australian Communications Authority (ACA) proposes to vary, under section 134 of the *Radiocommunications Act 1992* (the Act), the *Radiocommunications (Low Interference Potential Devices) Class License 2000*

Background to changes

The Radiocommunications (Low Interference Potential Devices) Class License 2000 authorizes the use of a wide range of lower power radio communications devices in various segments of the radio frequency spectrum. The LIPD Class License sets out the conditions under which many types of short-range devices may be operated. These conditions always cover frequency bands of operation and radiated power limits. Other conditions are applied as necessary. The ACA proposes to vary Schedule 1 of the class license to accommodate a

The ACA proposes to vary Schedule 1 of the class license to accommodate a new class of transmitter called a digital modulation transmitter in the three bands 915 – 928 MHz, 2400 – 2483.5 MHz and 5725 – 5850 MHz. These changes are aimed at facilitating the continued development and deployment of new wireless devices for business and consumers including Radio Local Area Network devices that would comply with the Institute of Electrical and Electronics Engineers (IEEE) emerging industry standard IEEE 802.11g in the band 2400 – 2483.5 MHz.

The <u>class license</u> authorizes any person to operate a device that uses a frequency:

- (a) on or within a range of frequencies, mentioned in column 3 of Schedule 1 of the Class License;
- (b) at a radiated power that does not exceed the maximum Equivalent Isotropically Radiated Power (EIRP) mentioned in column 4 of Schedule 1 of the Class License;
- (c) within any of the limitations mentioned in column 5 of Schedule 1 of the Class License.

COMMENTS

Under section 136 of the Act, the ACA is seeking representations about the proposed variation to the *Radiocommunications* (Low Interference Potential Devices) Class License 2000.

Information Package

A package containing a copy of the existing class license, the proposed amendment, and a background paper may be obtained by contacting:

Rebecca Dale, Space Systems Team Australian Communications Authority

PO Box 78

BELCONNEN ACT 2616

Telephone: 02 6219 5338 /Facsimile: 02 6219 5133

email: rebecca.dale@aca.gov.au

Contact Information

Rhein Tech Laboratories, Inc. 360 Herndon Pkwy, #1400 Herndon, VA 20170 703-689-0368 FAX 703-689-2056 http://www.rheintech.com/

RTL has provided EMC compliance engineering & testing services since 1988 and has a superior reputation with both the Federal Communications Commission and others in the industry. RTL provides testing services to meet the emissions, immunity, and safety requirements of the European EMC Directive and the EU R&TTE, all FCC rules and regulations, VCCI (Japan), ACA (Australia), and other international standards.

Back to top

Last revised: May 12, 2003

We respect the privacy of our customers. If you would like to cancel your Multipoint updates, just reply to this message and use "unsubscribe" as the subject line. The information in Multipoint update is subject to change without notice.