doc.: IEEE 15-11-0724-00-004g

Proposed Comment Resolution for CID 235 (MR-O-QPSK PHY)

Michael Schmidt- ATMEL

October 5, 2011

September 2011 doc.: IEEE 15-11-0724-00-004g

IEEE P802.15 Wireless Personal Area Networks

Title: Proposed Comment Resolution for CID 235 (MR-O-QPSK PHY)

Date Submitted: October 5, 2011

Source: Michael Schmidt - Atmel (email: michael.schmidt@atmel.com)

Re: Task Group 15.4g sponsor ballot comment resolution

Abstract: Proposed comment resolution for CID 235 (MR-O-QPSK PHY)
Notice: This document has been prepared to assist the IEEE P802.15.

It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or

withdraw material contained herein.

Release: The contributor acknowledges and accepts that this contribution

becomes the property of IEEE and may be made publicly available

by P802.15.

September 2011 doc.: IEEE 15-11-0724-00-004g

CID 235

Comment:

Local regulations are usually only designed to prevent interference from one type of service to another. Thus, they may not have any spectral mask limits in band. The lack of a spectral mask can allow devices of the same type to interfere with each other. A standard should prevent this.

Response:

Accept in principle. This is a proposed resolution for MR-O-QPSK.

September 2011 doc.: IEEE 15-11-0724-00-004g

Proposed Changes

Add the text and table to section 16.3.4.2:

"The transmitted spectral products shall be less than the limits specified in Table 1. For both, relative and absolute limits, average spectral power shall be measured using a resolution bandwidth given in Table 1. For the relative limit, the reference level shall be the highest average spectral power measured within $\pm f_o^{rel}$ kHz of the carrier frequency f_c , where f_o^{rel} is defined in Table 1."

Table: 1 - MR-O-QPSK PHY transmit PSD limits

Frequency band (MHz)	Frequency range	Relative limit dB	Absolute limit dBm	f _o ^{rel} (kHz)	Resolution bandwidth (kHz)
470 - 510	$ f - f_c > 150 \text{ kHz}$	-30	-30	50	10
779 - 787	$ f - f_c > 1.2 \text{ MHz}$	-30	-30	600	100
868 - 870	$ f - f_c > 150 \text{ kHz}$	-30	-30	50	10
902 - 928	$ f - f_c > 1.2 \text{ MHz}$	-20	-20	600	100
917 - 923.5	$ f - f_c > 1.2 \text{ MHz}$	-20	-20	600	100
920 - 928	$ f - f_c > 150 \text{ kHz}$	-30	-30	50	10
950 - 958	$ f - f_c > 150 \text{ kHz}$	-30	-30	50	10
2405 - 2483.5	$ f - f_c > 3.5 \text{ MHz}$	-20	-30	1000	100