Project	IEEE 802.20 Working Group on Mobile Broadband Wireless Access < http://grouper.ieee.org/groups/802/20/ >	
Title	Validity of the FCC emission formula and FCC rules	
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Source(s)		
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Re:	MBWA Call for Contributions for Evaluation Criteria for Section: 10.1.1 Transmitter	
Abstract	This document provides FCC rules to confirm the FCC emission attenuation formula	
Purpose	To verify the correctness of FCC attenuation formula in Evaluation Criteria Document Version 17 (Eval_Criteria_ver17_81005.doc) and adopt.	
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Patent Policy	The contributor is familiar with IEEE patent policy, as outlined in Section 6.3 of the IEEE-SA Standards Board Operations Manual http://standards.ieee.org/guides/opman/sect6.html#6.3 and in <i>Understanding Patent Issues During IEEE Standards Development</i> http://standards.ieee.org/board/pat/guide.html .	

Introduction

1

 This contribution checks the validity of the out of band emission limit formula in Table 19 of Evaluation Criteria document.

 Specified formula in Evaluation Criteria document (item 3 in Table 19): attenuation of the transmit power P by:

$$43 + 10\log(P)$$
 dB

FCC Rules and Regulations

2

- Part 24: Personal communications services (PCS)
- Section 24.238: Emission limitations for Broadband PCS equipment.
 It specifies:

The rules in this section govern the spectral characteristics of emissions in the Broadband Personal Communications Service.

(a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (*P*) by a factor of at least:

$$43 + 10\log(P)$$
 dB

The formula in the text is correct