
Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Correction to Path Loss Model in C80216j-06/13r1	
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Source(s)	David T Chen Motorola, Inc. 1441 W Shure Drive, Arlington Heights, IL60004 Roger Peterson Motorola Labs 1301 E. Algonquin Road, Schaumburg, IL 60196 USA	david.t.chen@motorola.com r.peterson@motorola.com
Re:	Call for Technical Proposals regarding IEEE Project P802.16j (IEEE 802.16j-06/027)	
Abstract	Correction to the path loss model of 802.16j-06/.013r1	
Purpose	Correct a typographical error P802.16j-06/13r1.	
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Correction to Path Loss Model

*David T. Chen, Roger Peterson
Motorola, Inc.*

1 Introduction

There is a problem with the model of Section 2.1.2.2. As written there is a large discontinuity of path loss which occurs at the breakpoint at $d=d_0'$. We believe this is an oversight for not including the frequency and antenna height correction terms in the equation for $d > d_0'$. We therefore propose the change as specified in Section 2.

2 Proposed Correction

Equation from Section 2.1.2.2 of C80216j-06/13r1 is currently:

$$PL(dB) = \begin{cases} 20 \log\left(\frac{4\pi d}{\lambda}\right) & \text{for } d \leq d_0' \\ A + 10\gamma \log\left(\frac{d}{d_0'}\right) + \Delta PL_f + \Delta PL_{ht} & \text{for } d > d_0' \end{cases}$$

That equation should be corrected:

$$PL(dB) = \begin{cases} 20 \log\left(\frac{4\pi p d}{\lambda}\right) + DPL_f + DPL_{ht} & \text{for } d \leq d_0 \\ A + 10 g \log\left(\frac{d}{d_0}\right) + DPL_f + DPL_{ht} & \text{for } d > d_0 \end{cases}$$