

## Insertion Loss equation

Insertion Loss Equation in the draft:

$$IL(f) \leq \left\{ \begin{array}{ll} 0.668 + 3.755\sqrt{f} + 3.608f & F_{min} \leq f < 1.5625 \\ -23.753 + 22.242f & 1.5625 \leq f < F_{max} \end{array} \right\} \text{ (dB)}$$

And the Picture in the draft 2.0:

## Comments Against Insertion Loss equation in draft 2.0

CI 128C	SC 128C.4.3	P 188	L 2	# 272
Healey, Adam		Broadcom Ltd.		

*Comment Type*    TR    *Comment Status*    X

Using Equation (128C-7), it appears the maximum insertion loss for 5GBASE-KR is allowed to be about 33.6 dB at 2.578125 GHz. This does not agree with a fitted attenuation limit of 13.4 dB at 2.578125 GHz and an insertion loss deviation limit of +/-2.8 dB at 2.578125 GHz. This implies the insertion loss should not exceed 16.2 dB at that frequency.

*Suggested Remedy*

Revisit the insertion loss equation for 5GBASE-KR.

*Proposed Response*    *Response Status*    O

# New proposed Insertion loss Equation

New Equation proposed:

$$Insertion\_loss(f) \leq \left\{ \begin{array}{ll} 0.668 + 3.755\sqrt{f} + 3.608f & F_{min} \leq f < 2.578125 \\ -18.753 + 13.48f & 2.578125 \leq f < F_{max} \end{array} \right\} \text{ (dB)}$$

# Insertion Loss Plot

New Insertion Loss Plot:

