

Supplement for comments #1,2,3

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Minimum channel insertion loss for PX40

- Minimum channel insertion loss (CHIL) is defined as Maximum Average launch power minus Maximum Average receive power, the architecture of these parameters is based on the link mode, which is showed in http://www.ieee802.org/3/bk/tools/8023bk_1207_linkmodel_v1.1.xls
- In P802.3bk D2.0 :
 - The mini CHIL for PX40 US = $7 - (-8) = 15$ dB

Description	PX40 US	Unit
Maximum Average launch power	7	dBm
Maximum Average receive power	-8	dBm
Minimum Channel insertion loss	15	dB

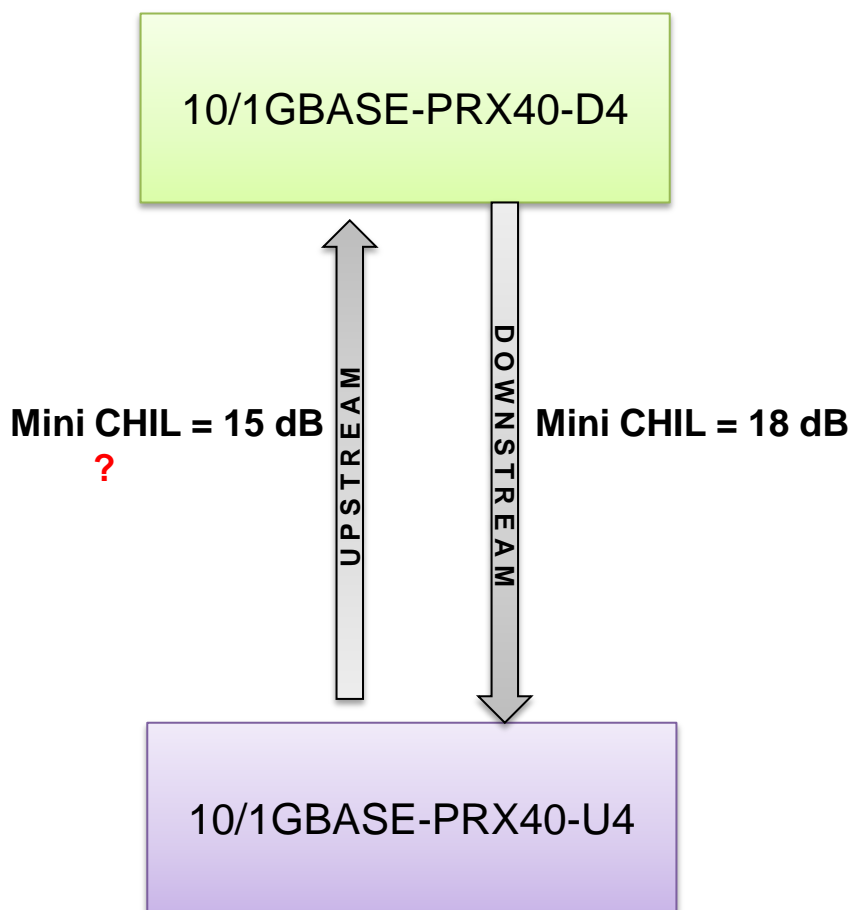
Minimum channel insertion loss for PX40

- Table 60-1 in P802.3bk D2.0 ,
 - It defined the mini CHIL for PX40 is 18dB.
- The actual mini CHIL for PX40 Upstream is $7 - (-8) = 15$ dB, it doesn't match the number in Table 60-1.

Table 60–1—PMD types specified in this clause

Description	1000BASE-PX10-U	1000BASE-PX10-D	1000BASE-PX20-U	1000BASE-PX20-D	1000BASE-PX30-U	1000BASE-PX30-D	1000BASE-PX40-U	1000BASE-PX40-D	Unit
Maximum channel insertion loss	20	19.5	24	23.5	29		33		dB
Minimum channel insertion loss	5		10		15		18		dB

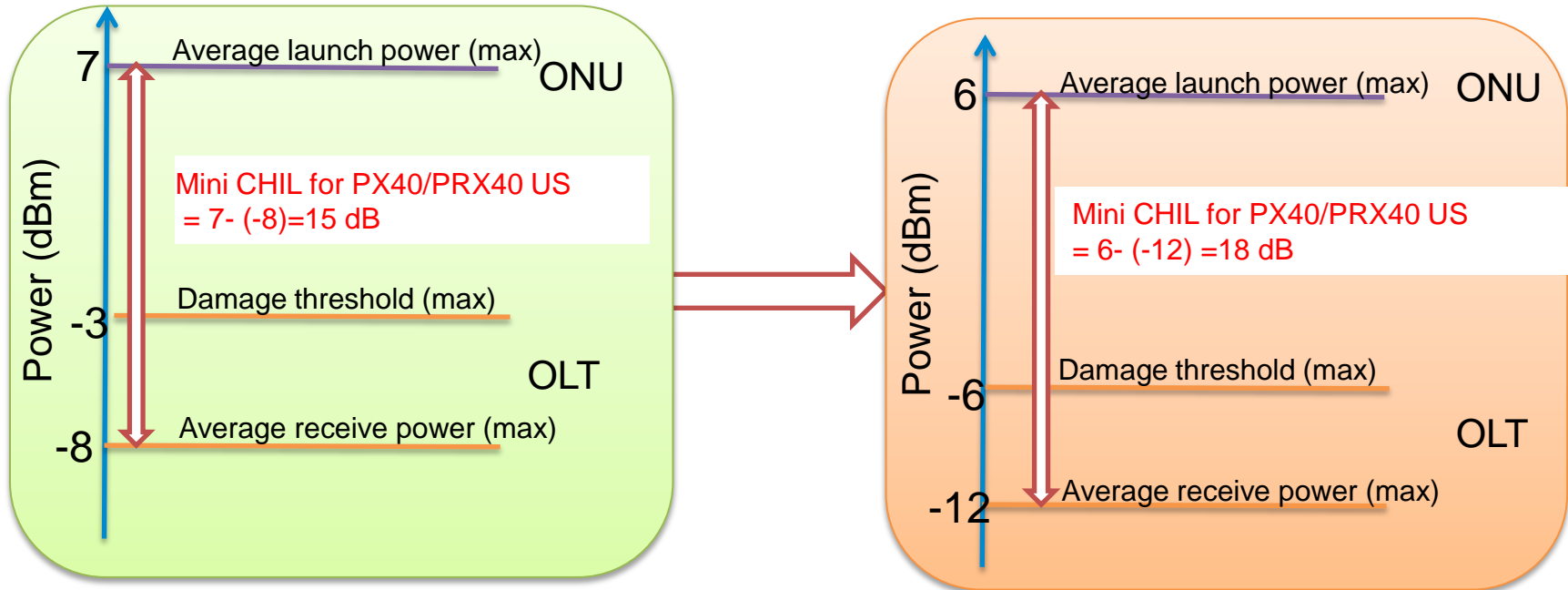
Minimum channel insertion loss for PRX40



- Table 75-1 in P802.3bk D2.0,
 - Which is defined the minimum channel insertion loss for PRX40 as 18dB.
- In P802.3bk, the upstream of PRX40 is defined the same as the upstream PX40,
 - Which is showed in Table 75-7 and Table 75-9
- But the mini CHIL for PX40 Upstream is $7 - (-8) = 15$ dB, it is the same as PRX40 upstream, it will not match the requirement in Table 75-1.

The proposal new parameters for PX40/PRX40 US

- According to the minimum channel insertion loss for PX40 as 18 dB. so we suggest to change US parameter of PX40 in Table 60-8e.
- at OLT side: (Rx) average receive power(max) from -8 dBm to -12 dBm
- Damage threshold (max) from -3 dBm to -6 dBm
- at ONU side: (Tx): Average launch power(max) from 7 dBm to 6 dBm
- Then the mini CHIL for PX40 US = $6 - (-12) = 18$ dB is satisfied.




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Thank you