Beyond Worst Case: Good News

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Hubbell Premise Wiring

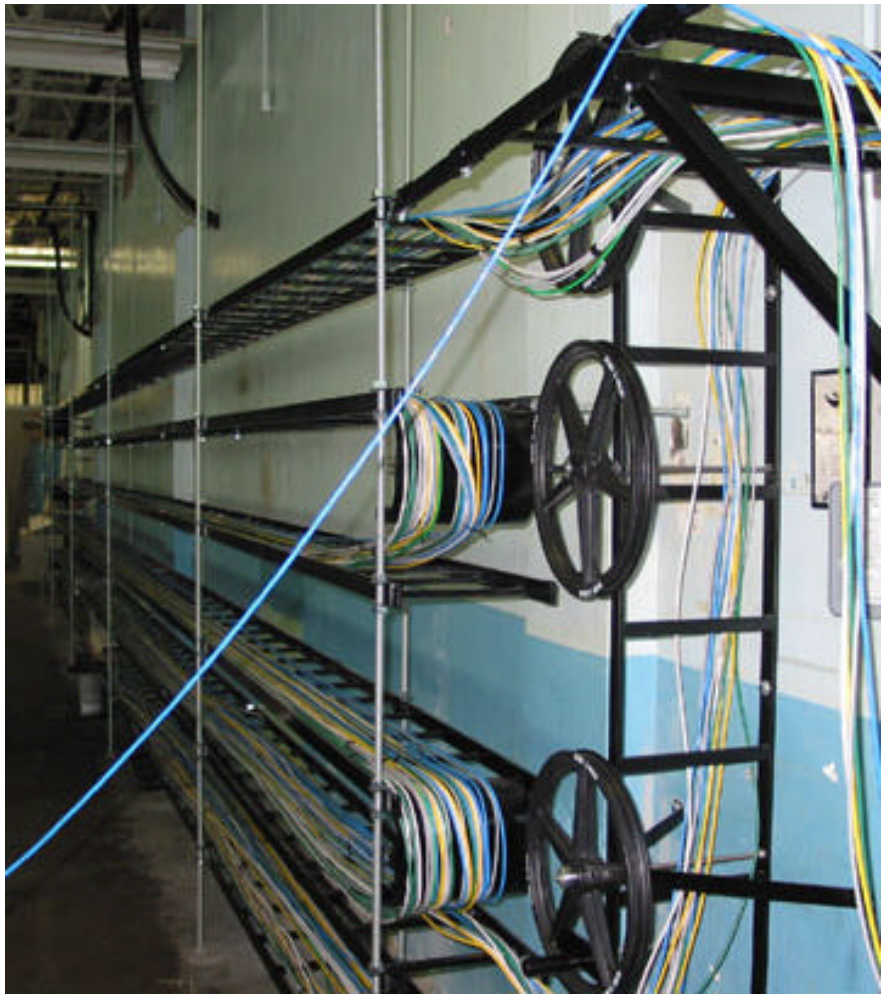
IEEE802.3 Interim May 2003

10GBASE-T

Typical Installation Evaluation

- What does the C6 installed base look like?
  - NEXT
  - ANEXT
- Does the number of connectors matter?
- Thoughts on Insertion Loss.

Cabling Setup



Category 6 (Class E)

100 m long channel. (Also have 60m, 30m and 10m, data not presented here.)

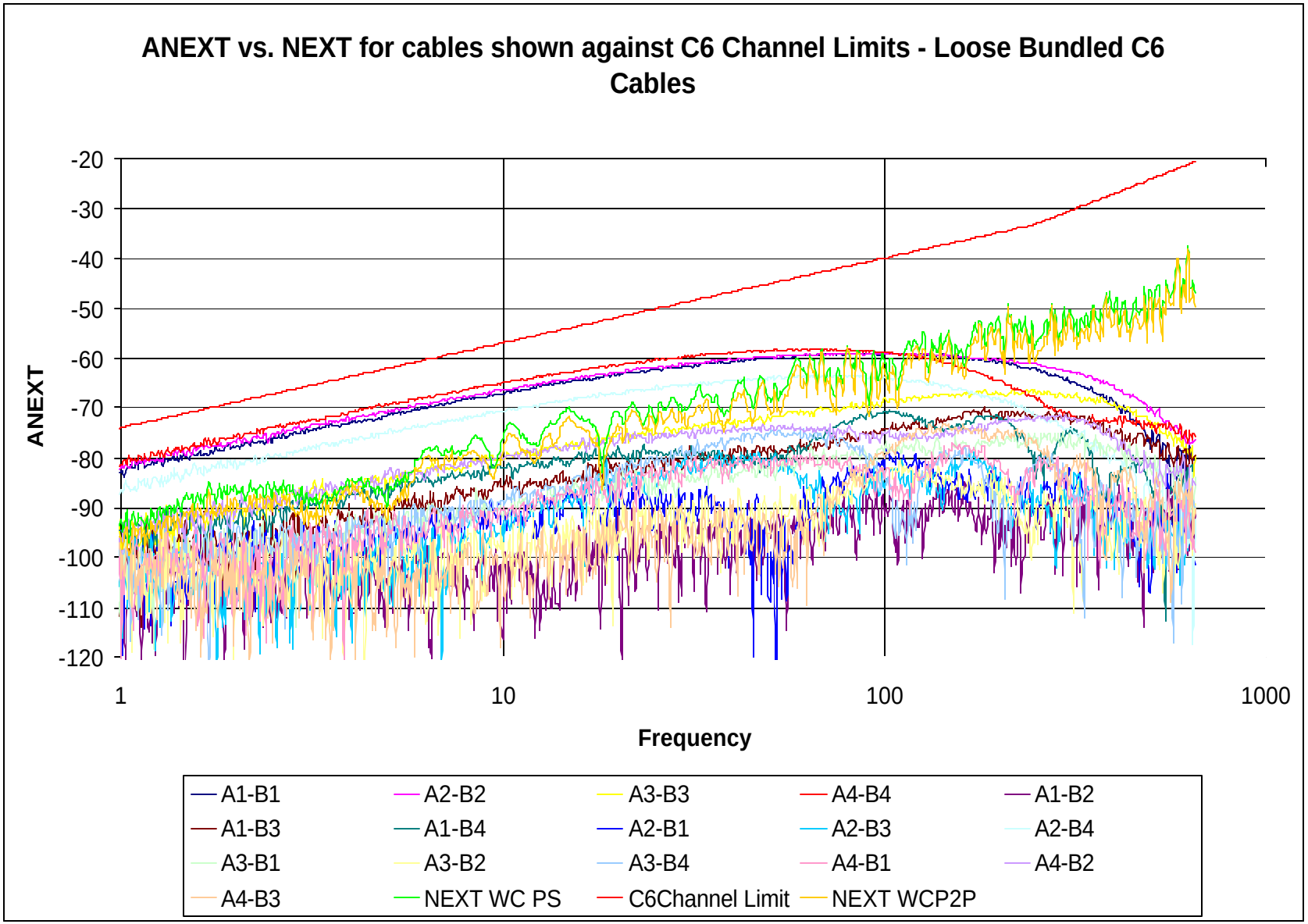
Bundles of 3 cables of same type in each bundle.

Loose bundles, straps every 1 to 4 ft (depending on location).

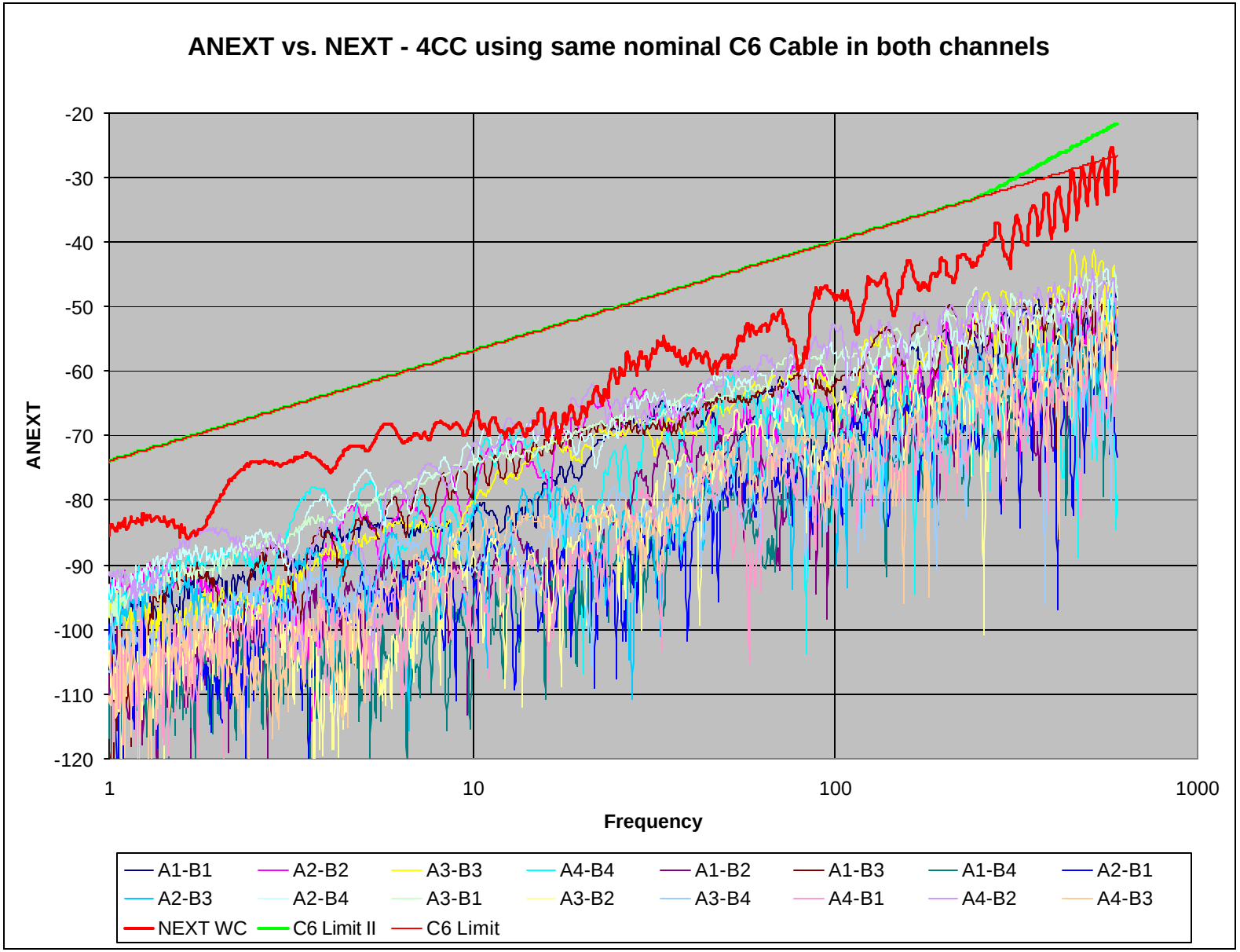
4 Connector Channels, adjacent Panel Ports.

Older Hardware of several manufacturers tested. Typical shown.

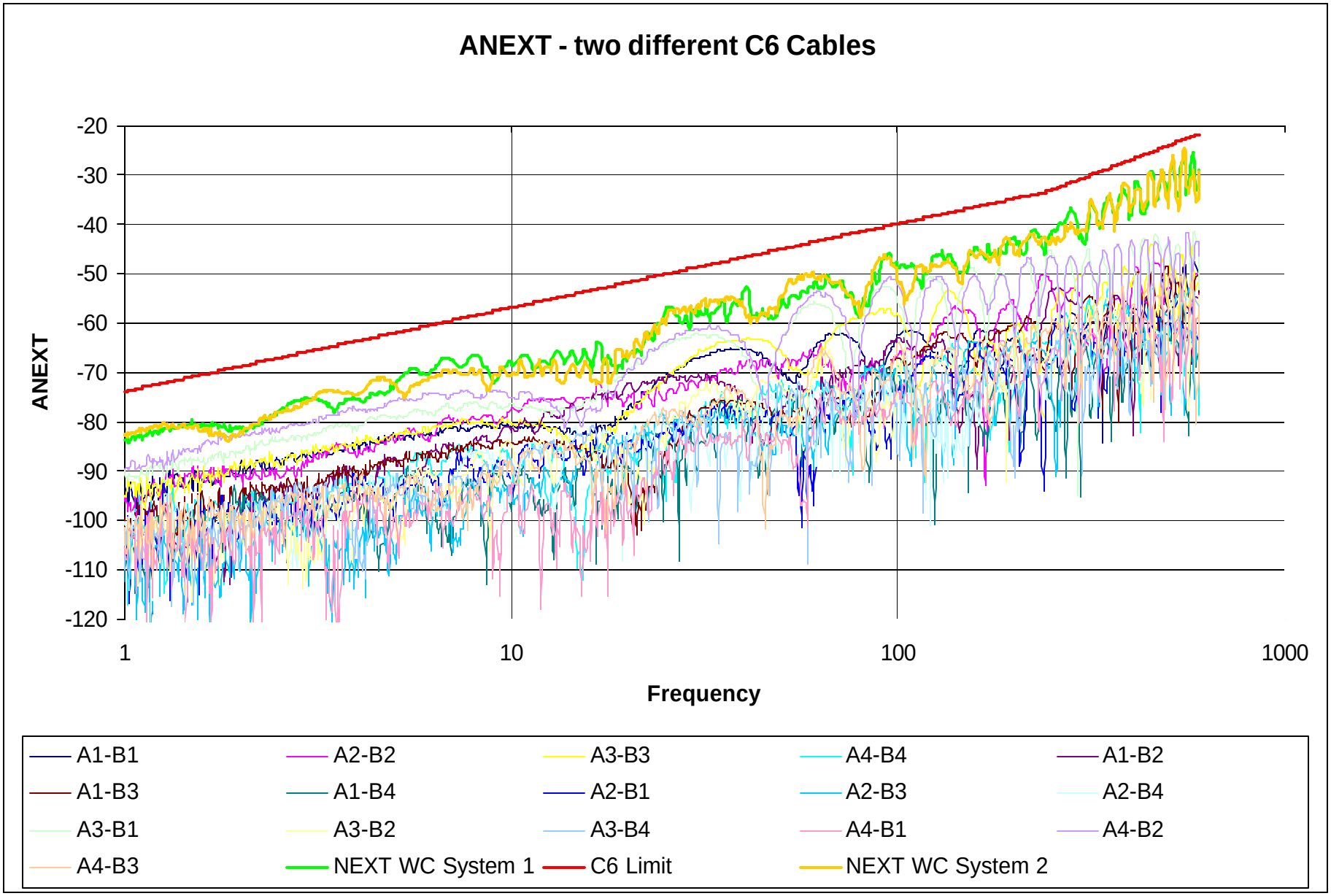
ANEXT vs. NEXT – Same Cable Type.



ANEXT vs. NEXT C6 Channel



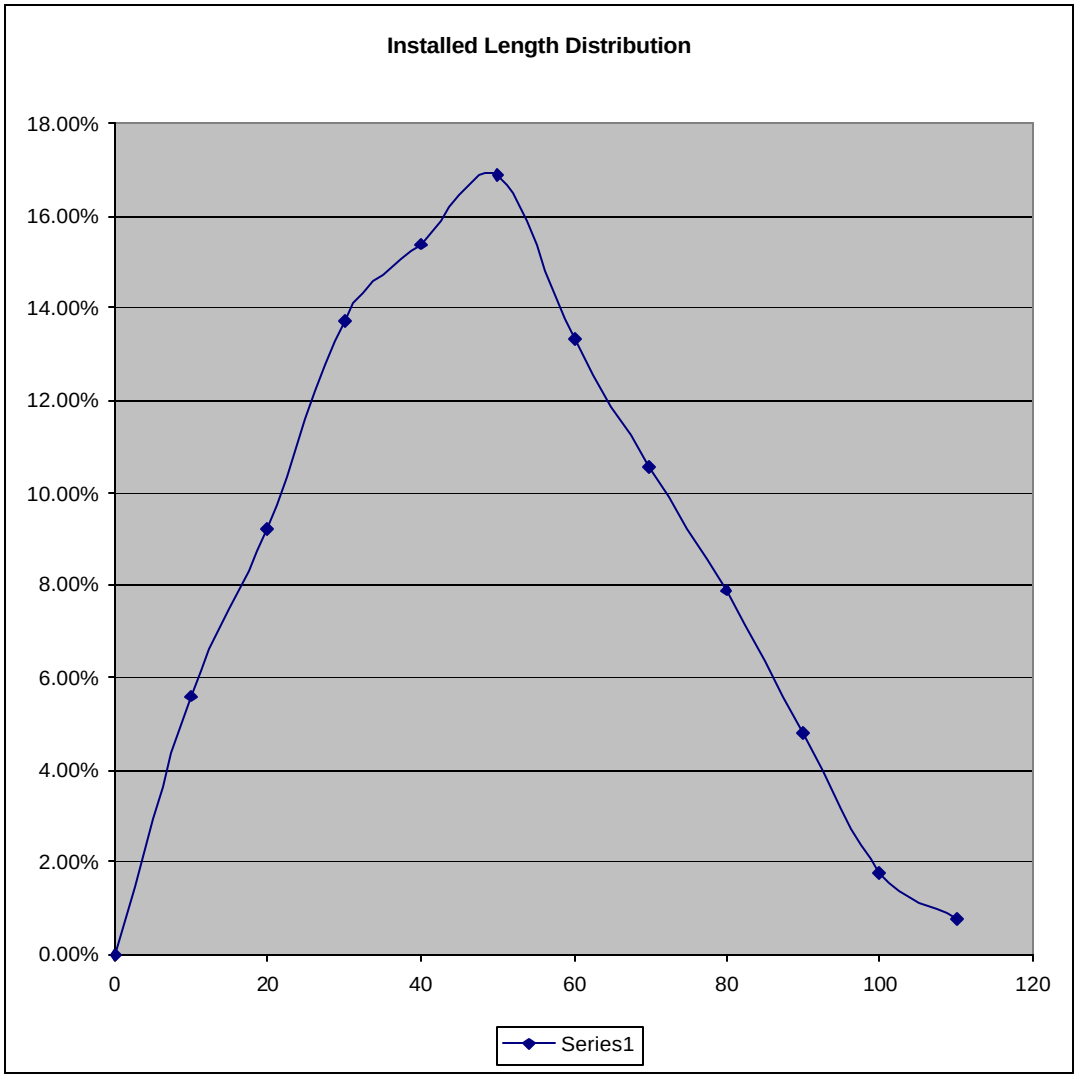
Two different C6 Cables in the two 4CCs.



Conclusions: What do installed channels look like.

- NEXT is worse than extended C6 limit.
- ANEXT is better than “Worst Case” being shown in Capacity Calculations.
- Return Loss is better than C6 Limits Extended.
- Number of connectors matters only close to measurement end.
- How About IL?

Insertion Loss



Insertion loss depends on:

- Cable performance
- Channel length

Expected W.C. IL = P(W.C. margin) x P(length)