Alien Crosstalk Test Results for a Potential 40GBASE-T Channel

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Acknowledgements

•Thanks to Berk-Tek for providing 2GHz S/FTP 23AWG 0.30" DOJ horizontal and 26AWG 0.23" DOJ solid patch cable in support of this presentation.

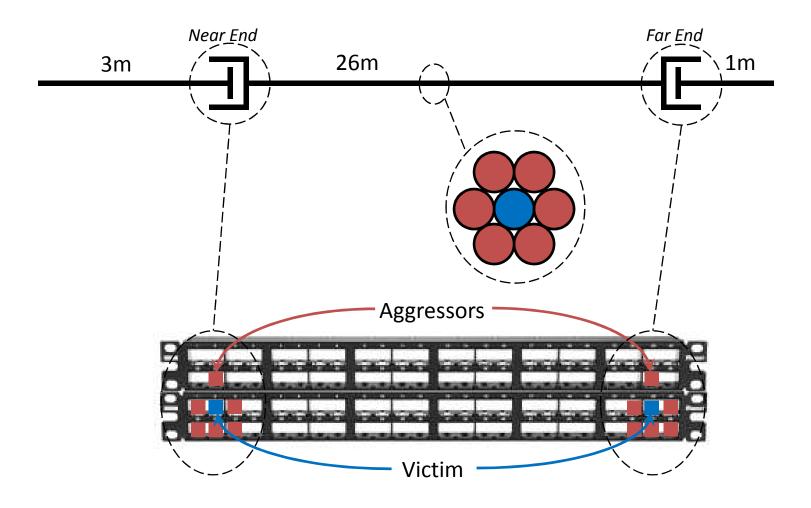
Supporters

- Brad Booth Dell
- Mike Grimwood Broadcom
- Will Bliss Broadcom
- Yakov Belapolsky BelFuse
- Paul Vanderlaan Berk-Tek
- Martin Rossbach Nexans
- Harry Forbes Nexans
- Dan Dove APM
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Test Setup

- 26m of 40G S/FTP horizontal cable terminated with S-RJ45 connectors (enhanced GG45 IEC 60603-7-71)
- 3m and 1m 40G solid conductor patch cords
- 6-around-1 bundle
- 2 connector channel
- 48 port high density patch panels

Long Channel PSANEXT Set-Up

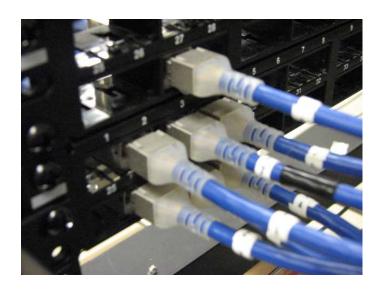


Jacks were installed into high density 48 port patch panels

6-around-1 PSANEXT test setup

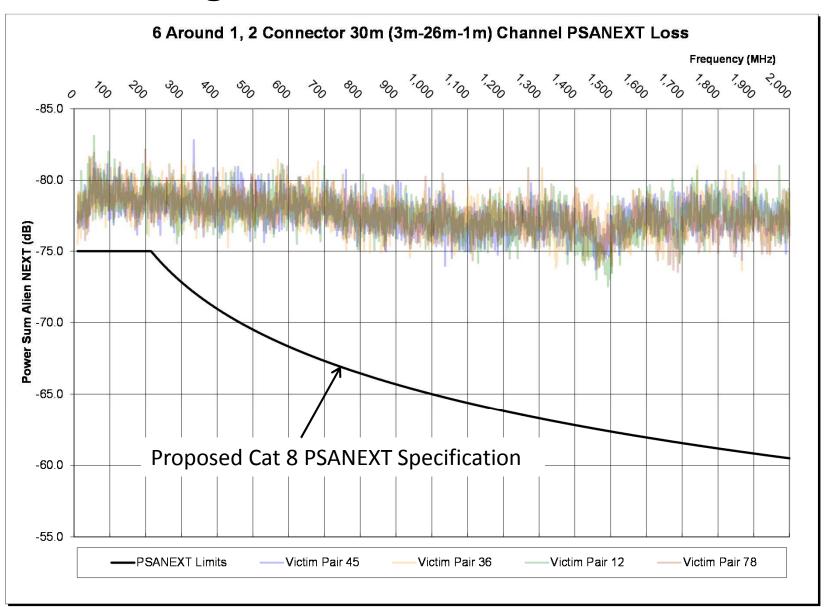


S-RJ45 Horizontal cable side of patch panel



Patch cord side of patch panel

Long Channel PSANEXT Loss



Summary

 Using a 6-around-1 channel configuration with 2GHz cable and S-RJ45 connectivity it is shown that it well exceeds the proposed Cat 8 PSANEXT specification.

Potential Further Actions

 Create an Ad Hoc group to work towards an agreement for estimating/determining PHY complexity / power consumption vs channel requirements