ISO/IEC PDTR 11801-99-1

Channel II measurements

IEEE P802.3bq 40GBASE-T Task Force

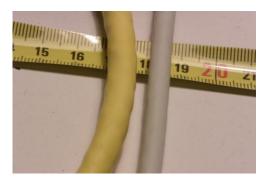
December 2013

Channel II measurements

- Dieter Schicketanz, consultant
 - University of Science, Reutlingen
- Yvan Engels
 - Leoni Kerpen

Set up

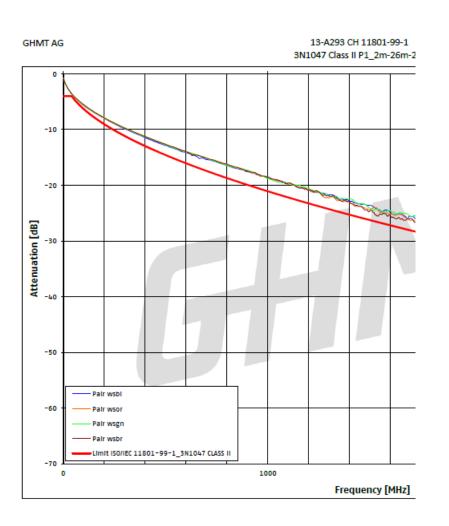
- Measurement of a 30 m channel
 - 2m flexible cord; 5,8 mm diameter
 - IEC 61076-3-104 (Tera) cat7_△ connection
 - 26m horizontal cable; 8,2 mm diameter
 - IEC 61076-3-104 cat7_{Δ} connection
 - 2m flexible cord

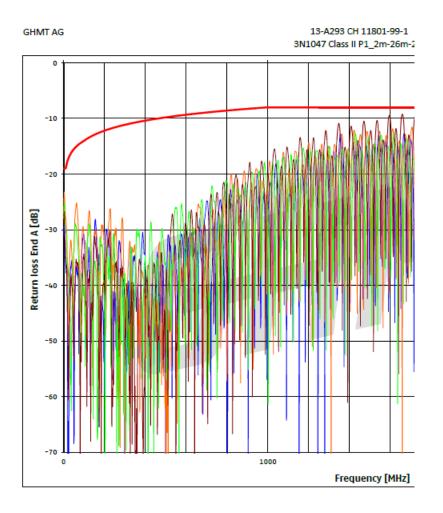


 Limit lines of Proposed Draft Technical Report as of November 2013

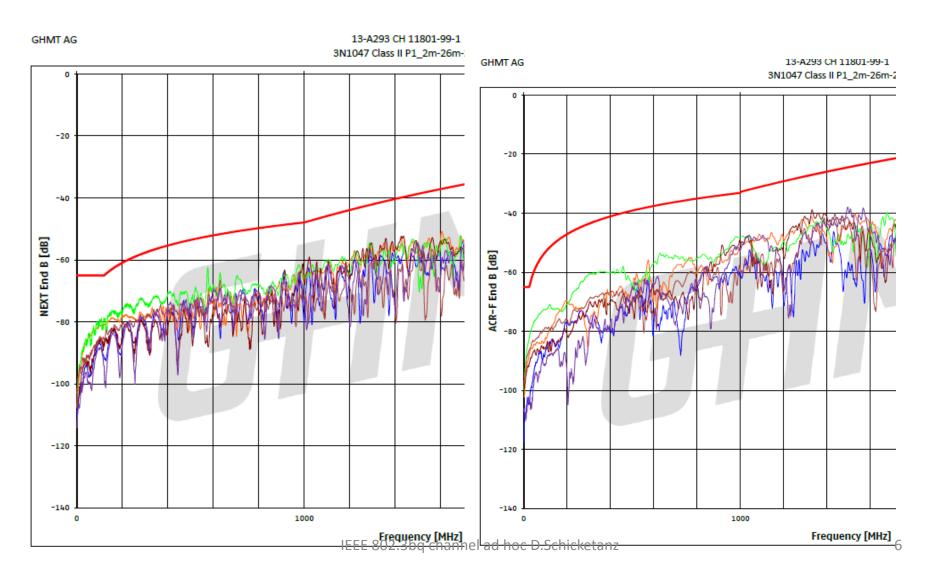
- Touchstone file will be delivered for the January meeting
- Shorter channel measurements will be delivered for the January meeting

30m channel insertion loss and return loss

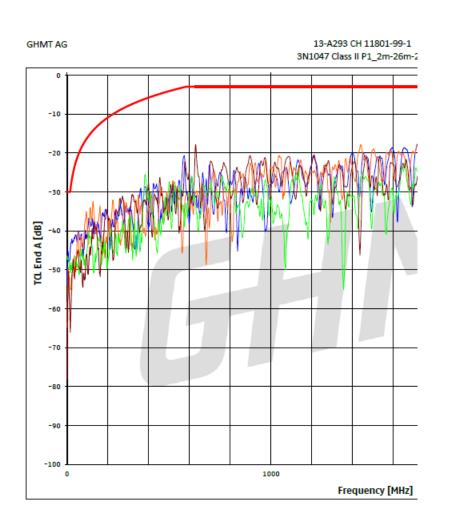


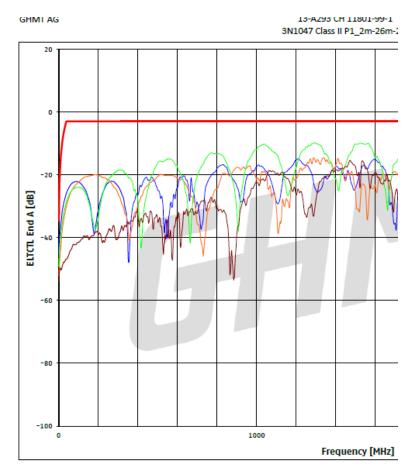


30m Channel NEXT and ACR-F



30m Channel TCL and ELTCTL





Conclusion

These measurements will be combined with the other files to see the influence of MDI and PCB.

The PCB files need to be adapted because they do not exhibit 1 MHz Frequency steps but 10 MHz steps.

Question: which is the S parameter numbering convention to be used?