
802.3 25 Gb/s Study Group

Considerations for 25 Gb/s Cable Assembly Specifications

Chris DiMinico
MC Communications/Panduit
cdiminico@ieee.org

Purpose

- Review 3m channel model

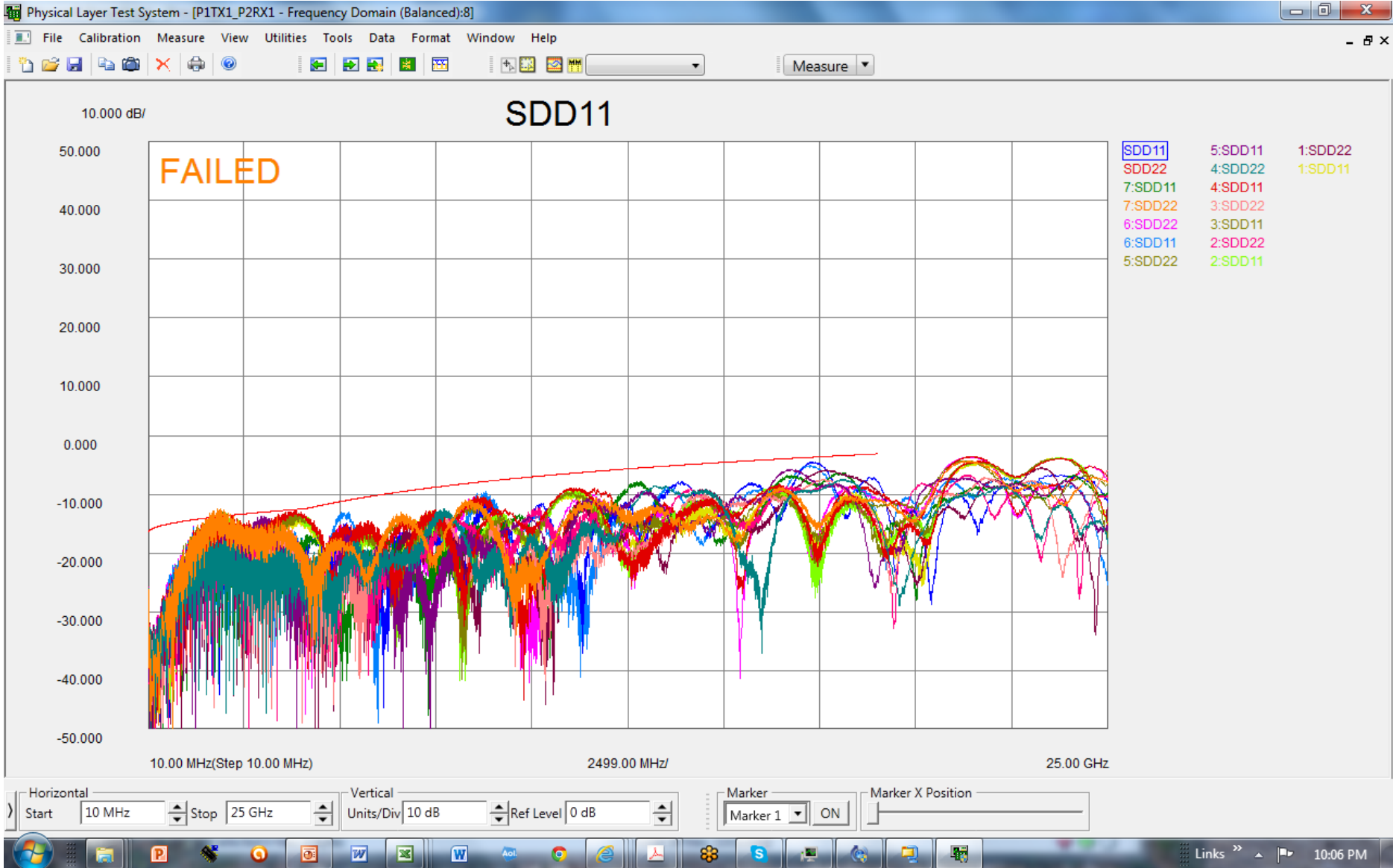
- <http://www.ieee802.org/3/by/public/channel/index.html>

- Amphenol_NDACGJ-0003_QSFP-4SFP_3m_26AWG_APN43140033HXJ.zip

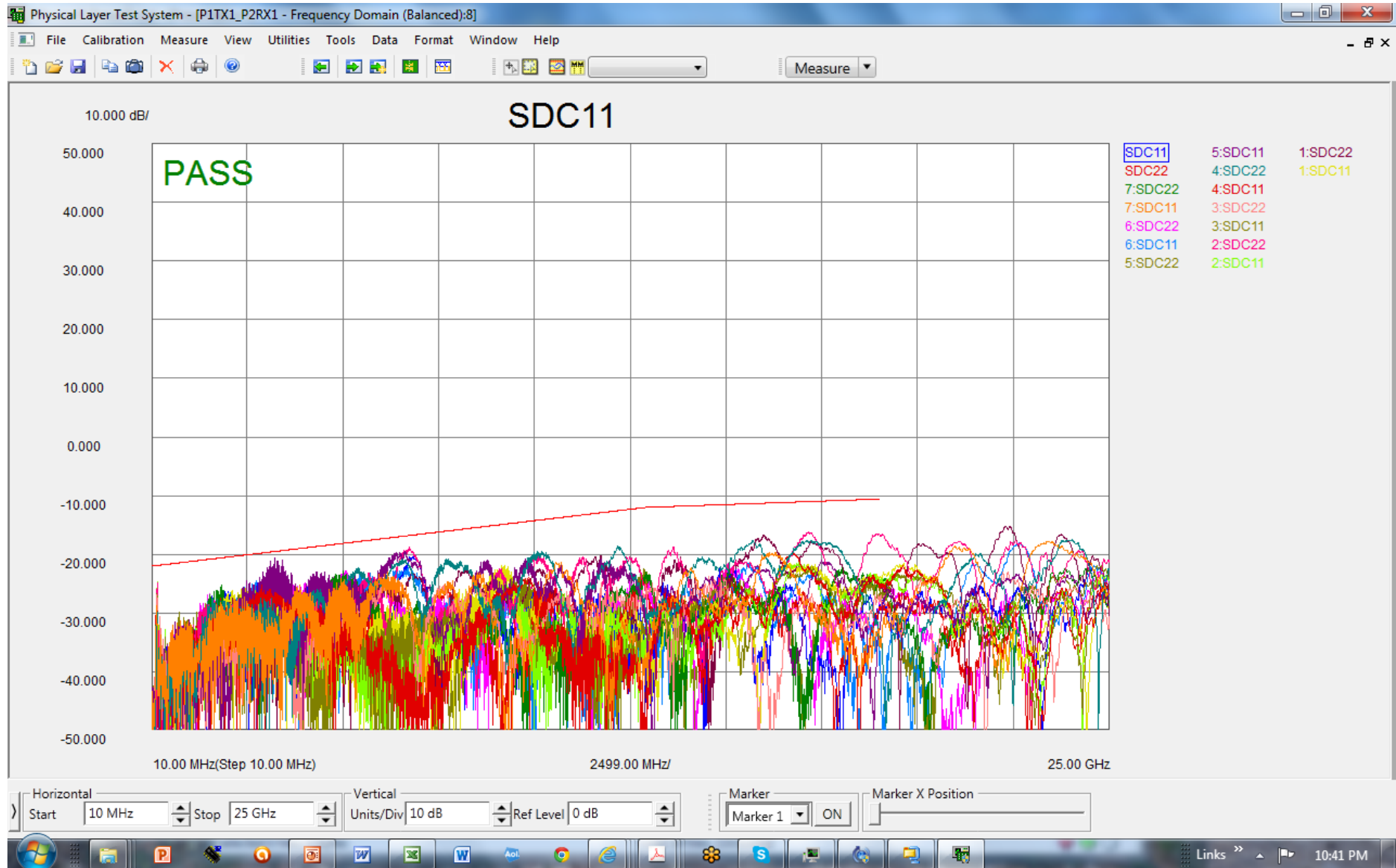
Insertion loss – 802.3bj limits



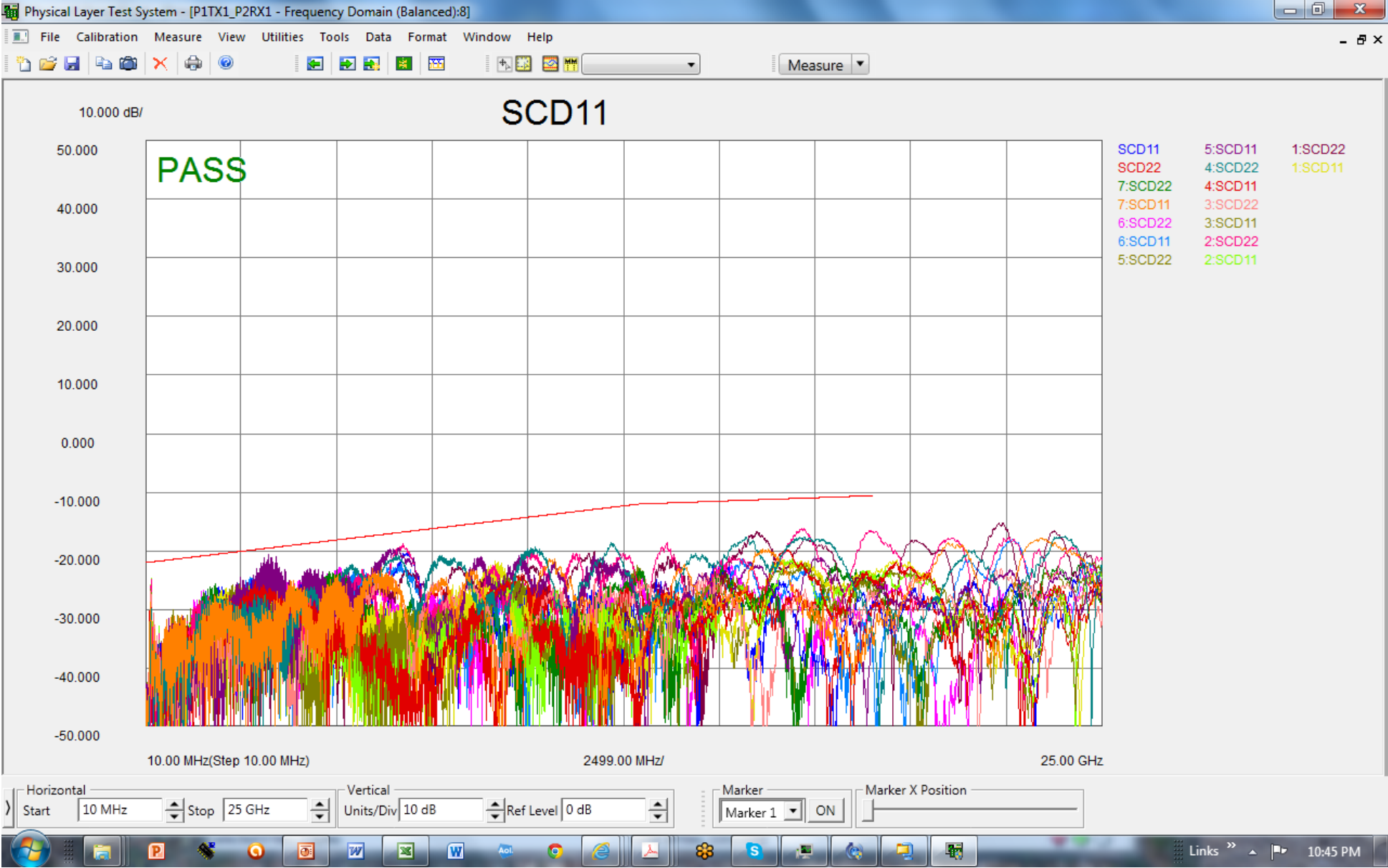
Return loss – 802.3bj limits



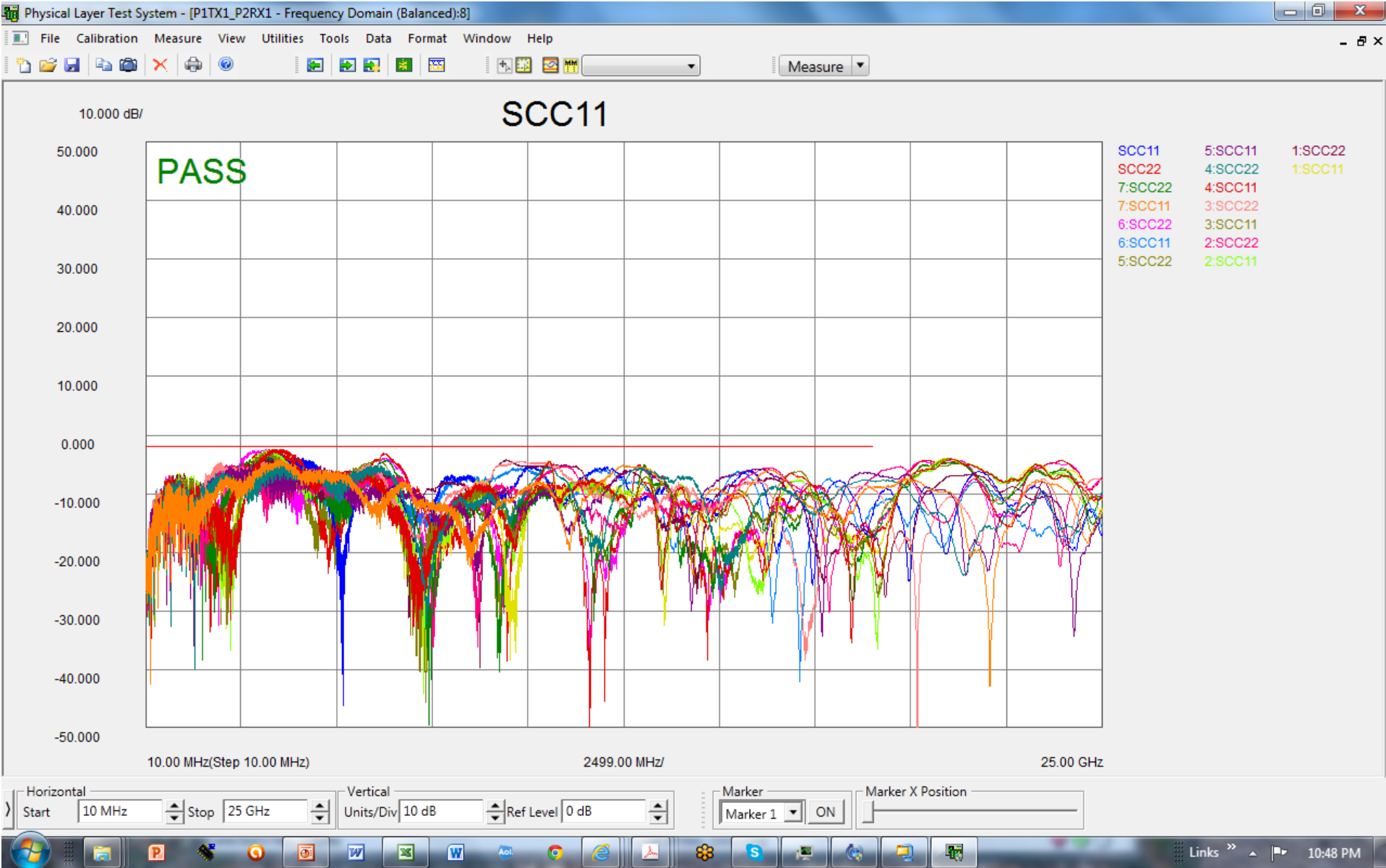
CM-DM- return loss – 802.3bj limits



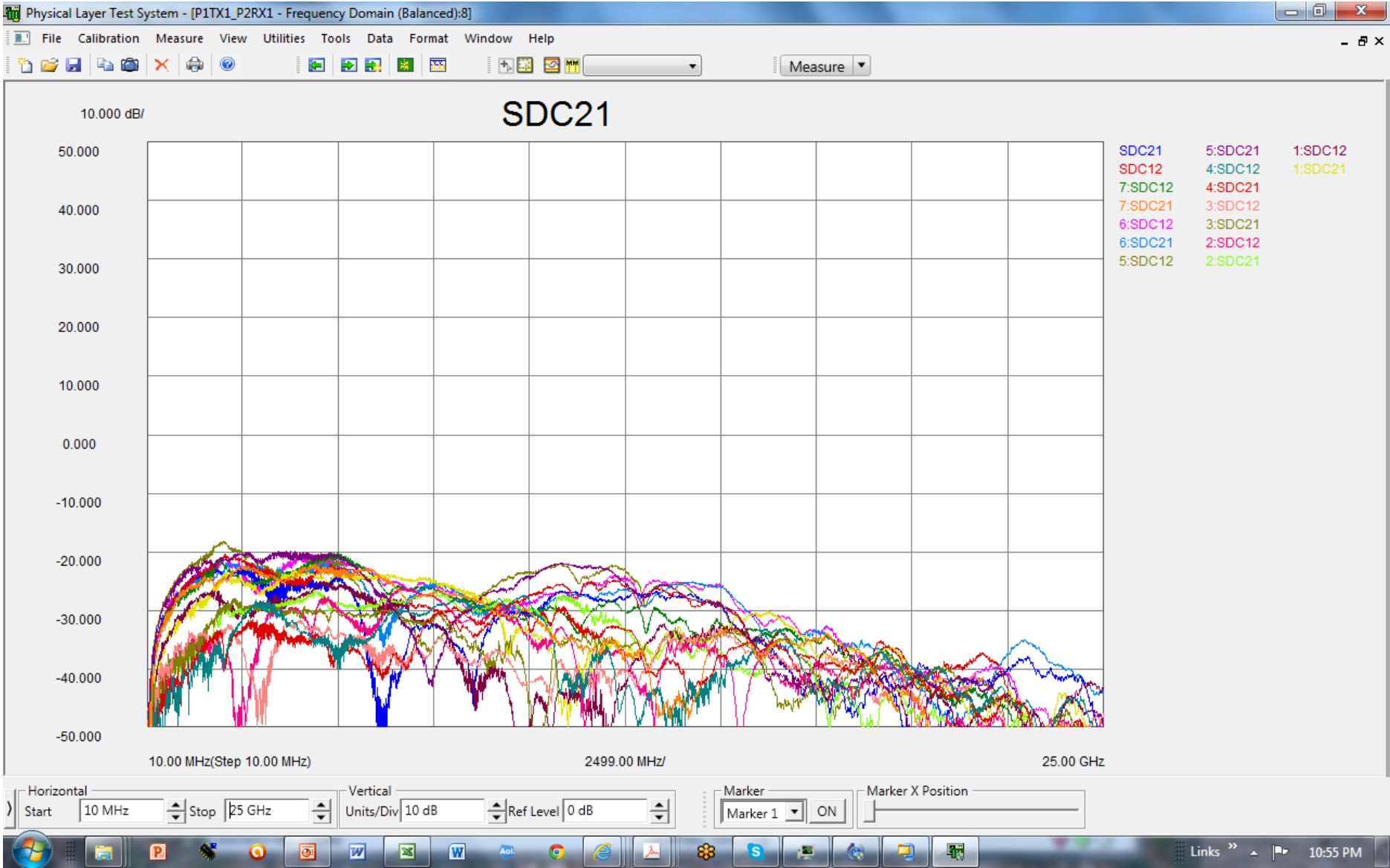
DM-CM return loss – 802.3bj limits



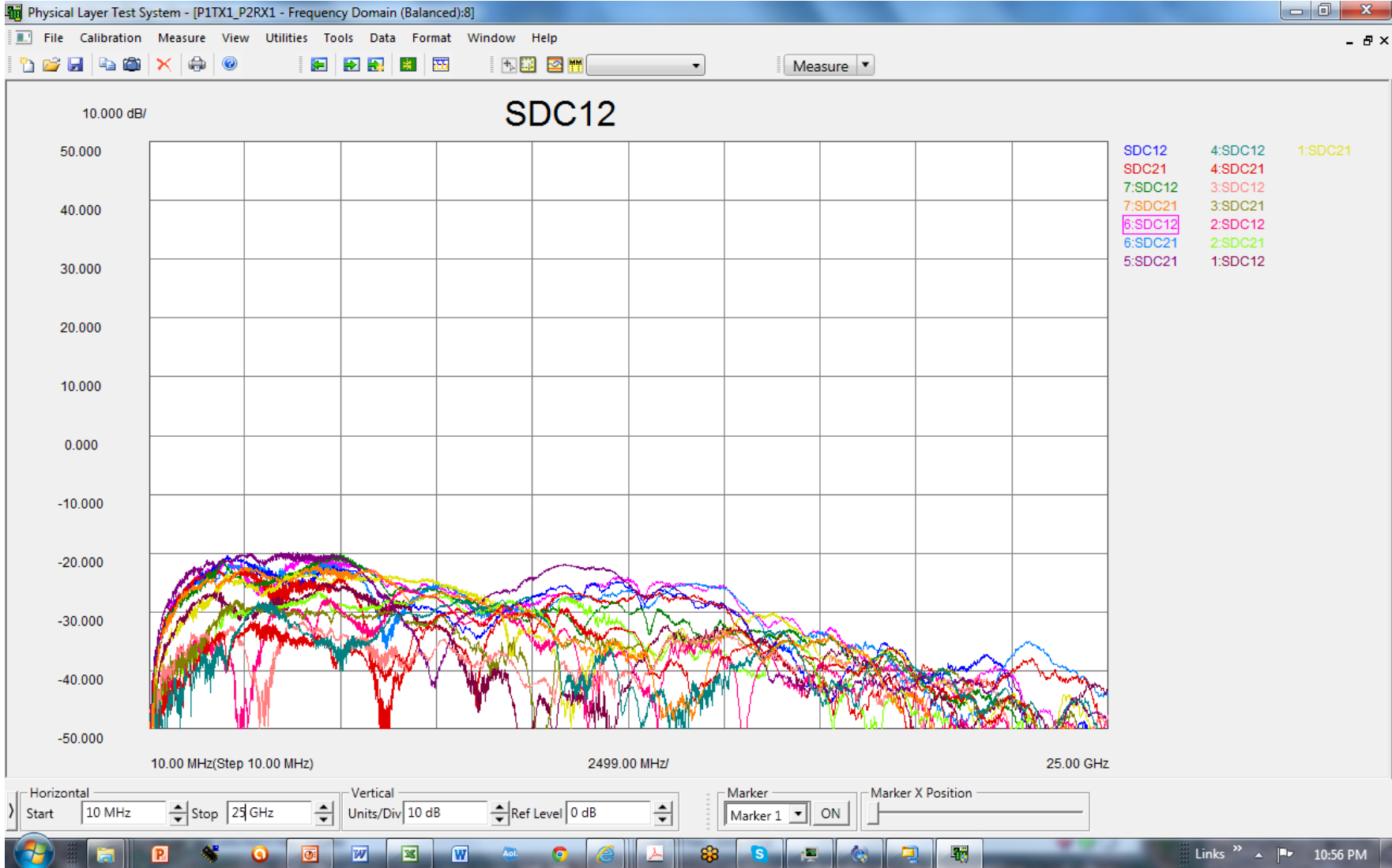
CM return loss – 802.3bj limits



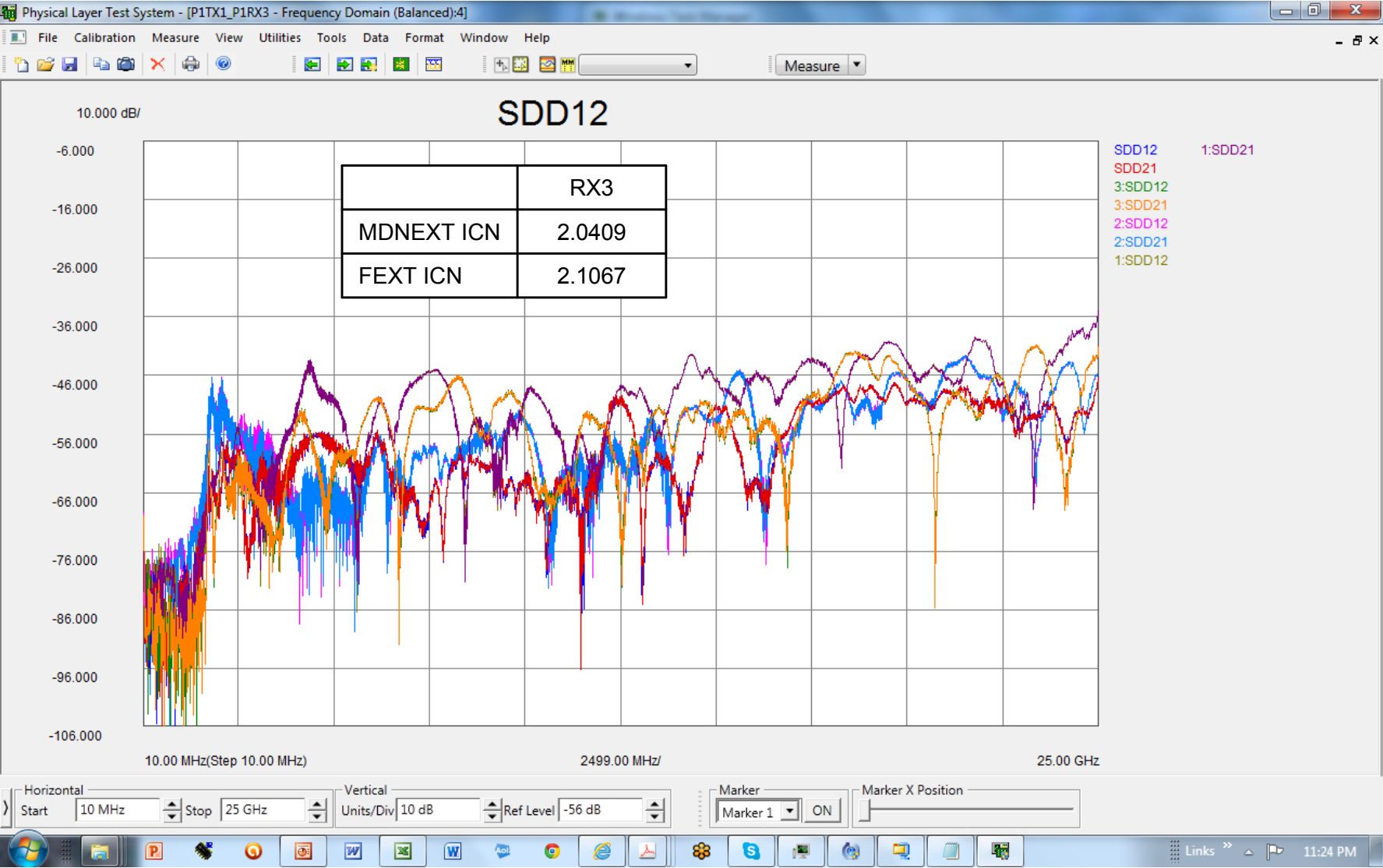
CM-DM conversion loss



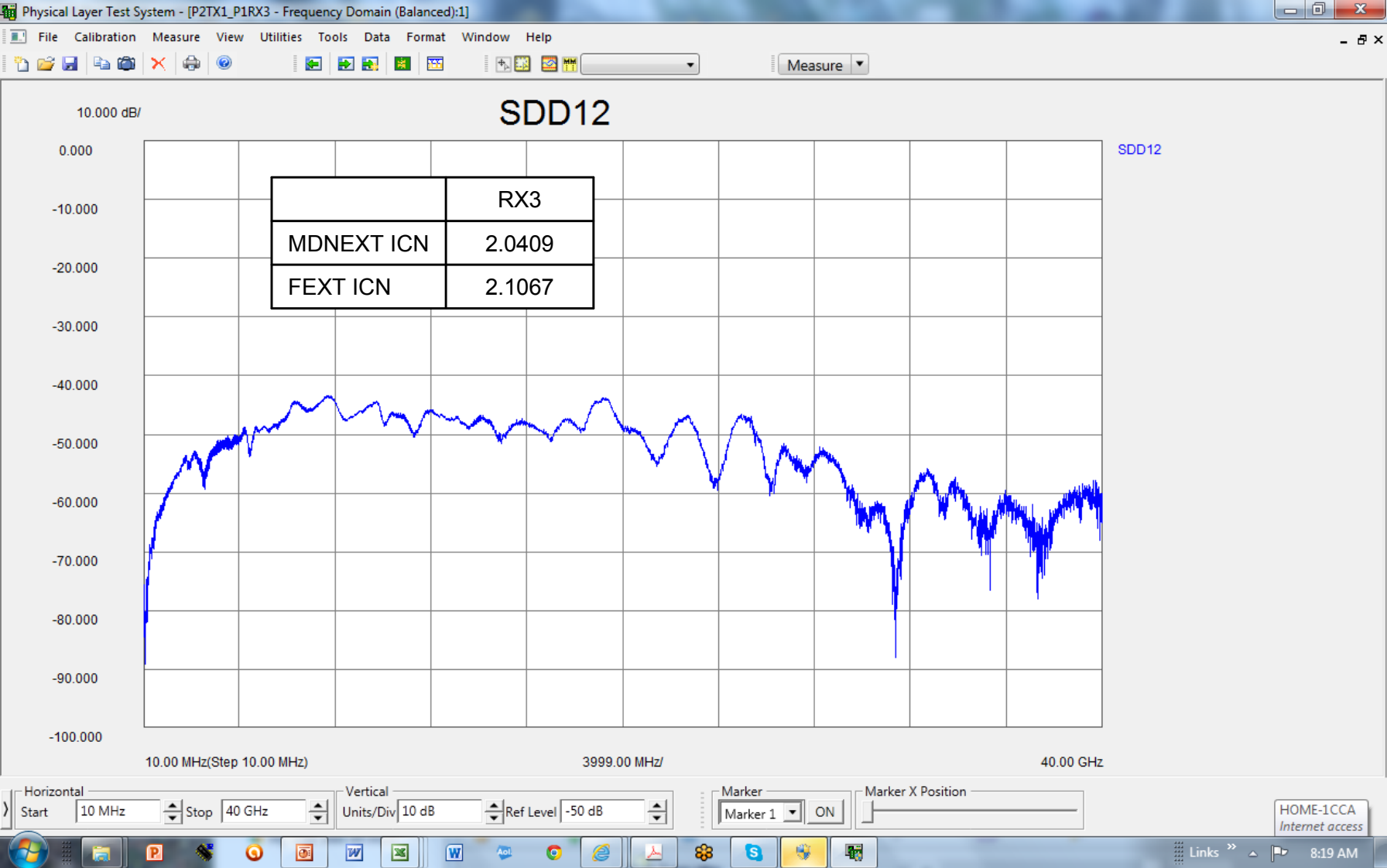
CM-DM conversion loss



MDNEXT – QSFP side



FEXT – QSFP side



Summary and recommendation

- Review 3m channel model

- <http://www.ieee802.org/3/by/public/channel/index.html>

- Amphenol_NDACGJ-0003_QSFP-4SFP_3m_26AWG_APN43140033HXJ.zip

- For breakout, include FEXT from 3 disturbers in COM analysis to account for QSFP connector crosstalk.

