

A world map is visible in the background, rendered in a light gray color. The top and bottom of the slide feature a blue, grid-like pattern that resembles a globe's latitude and longitude lines.

# STP cable

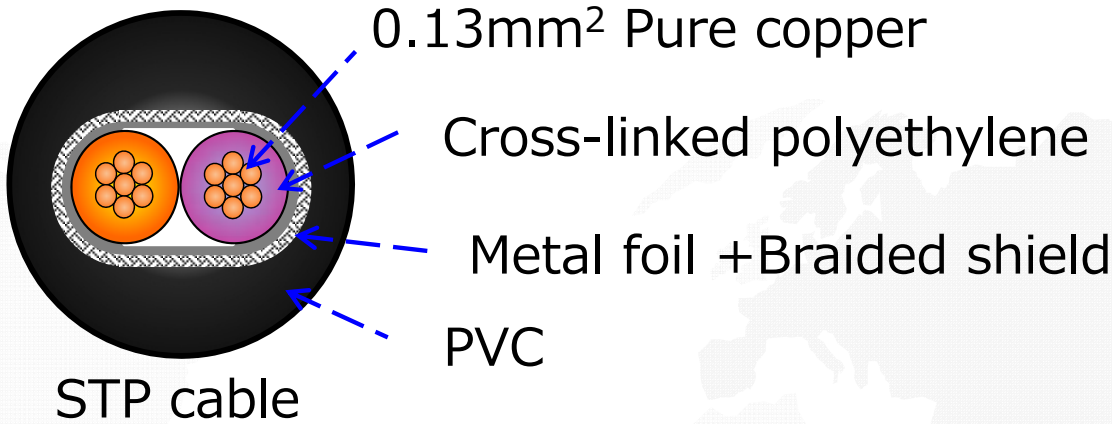
Measurement result  
of TCL, ELTCL and coupling attenuation

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2018.05.16

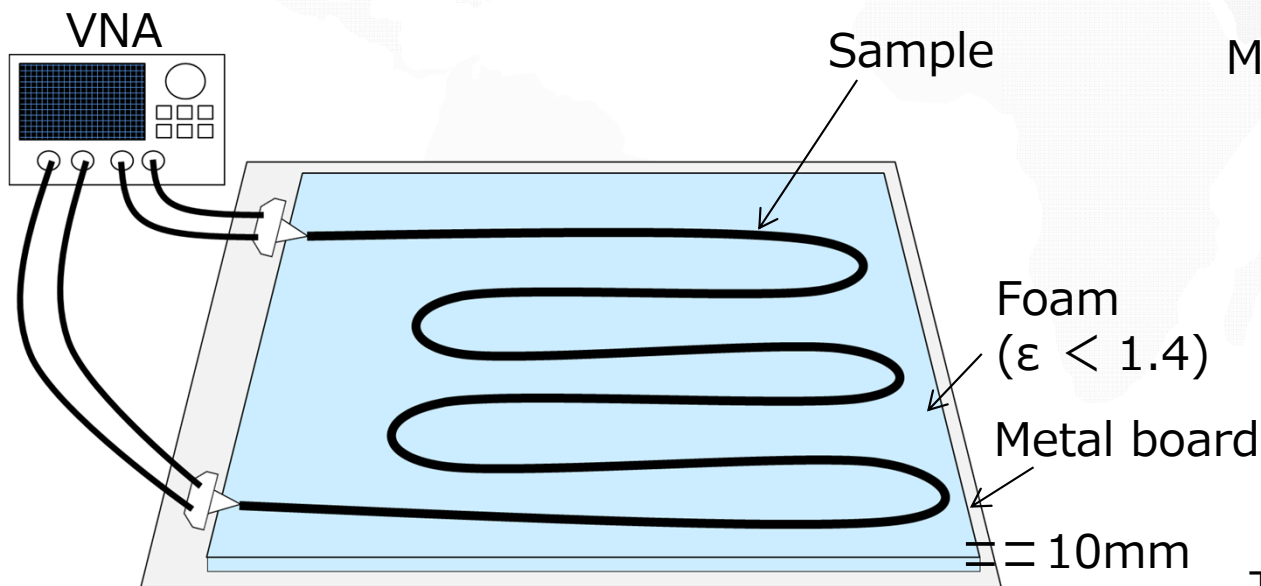
- 1 Sample and Measurement system of TCL and ELTCL
- 2 Measurement result of TCL and ELTCL
- 3 Measurement system of coupling attenuation
- 4 Measurement result of coupling attenuation 5°C

# 1 Sample and Measurement system of TCL and ELTCL

## ➤ Cable structure



## ➤ Measurement system



Measurement frequency : 1MHz~3.5GHz

Measurement parameter

TCL : Sdc11, Sdc22

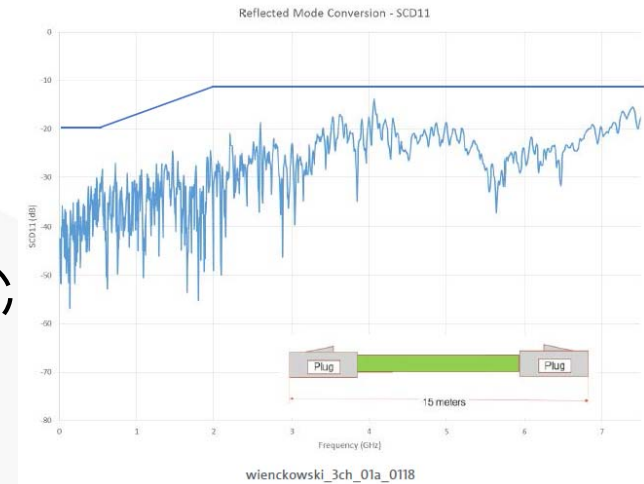
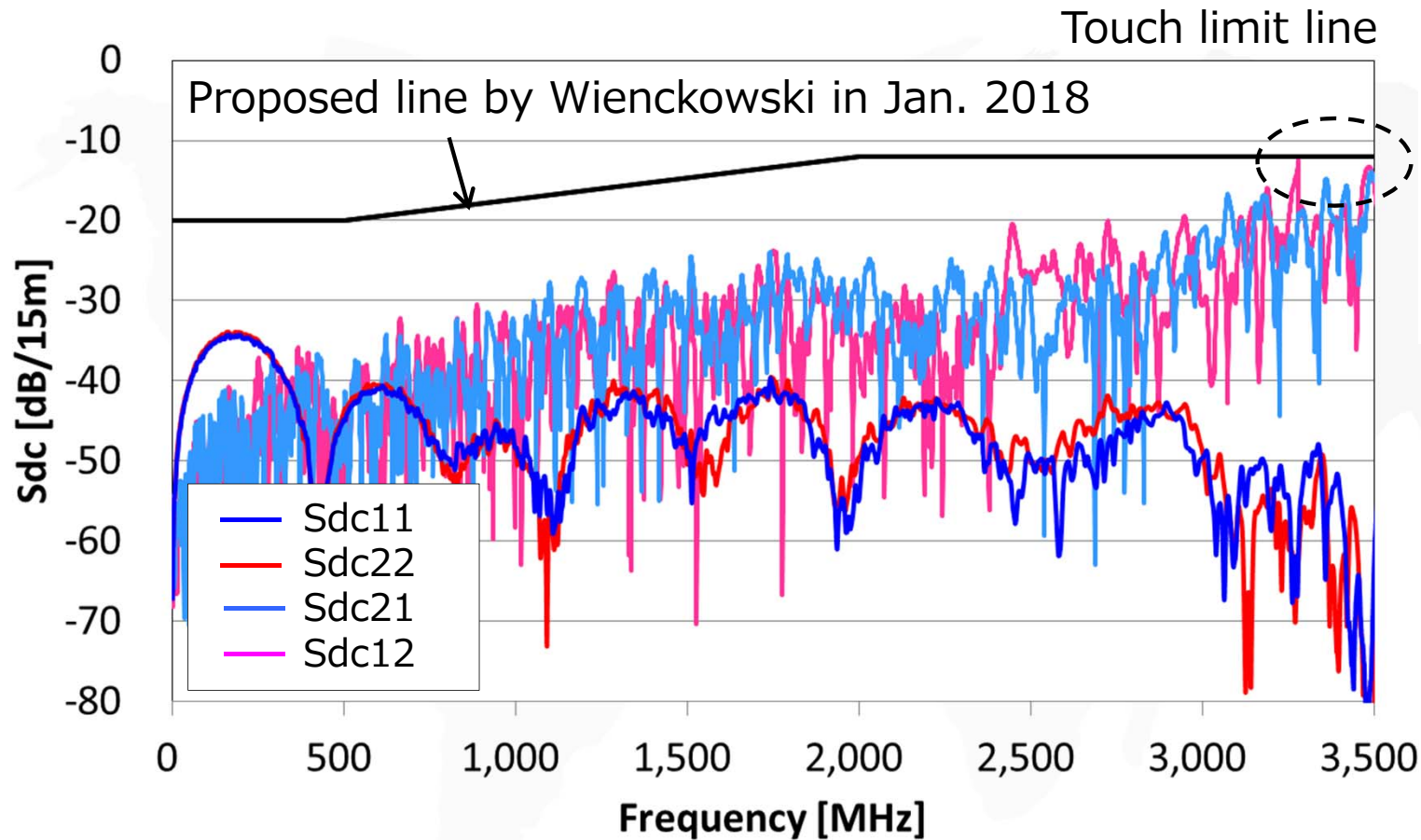
ELTCL : Sdc21, Sdc12

Sample length : 15m

TCL : Transverse Conversion Loss

ELTCL : Equal Level Transverse Conversion Loss

## 2 Measurement result of TCL and ELTCL

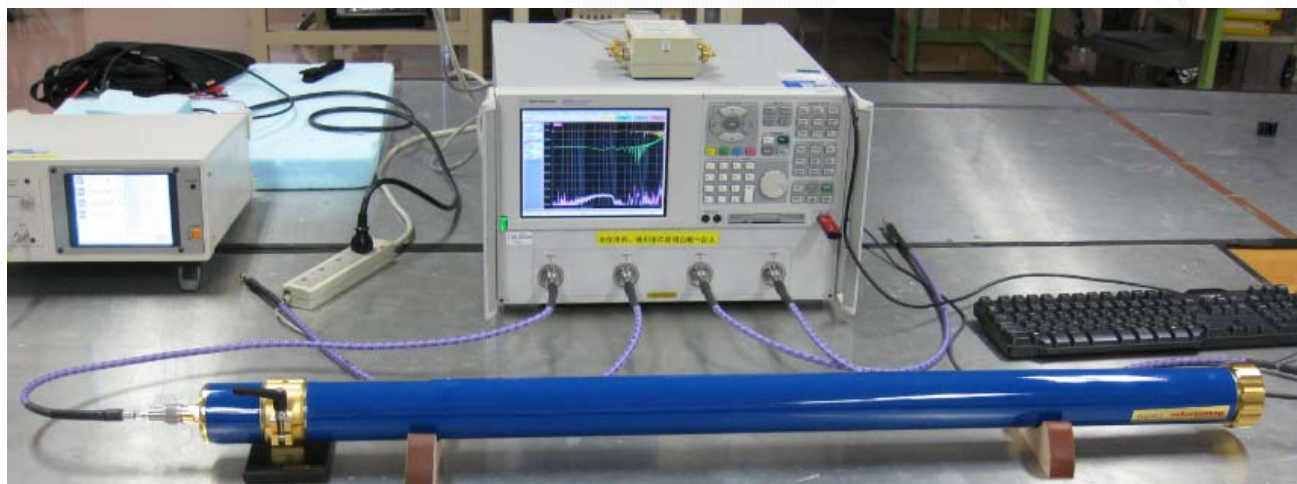
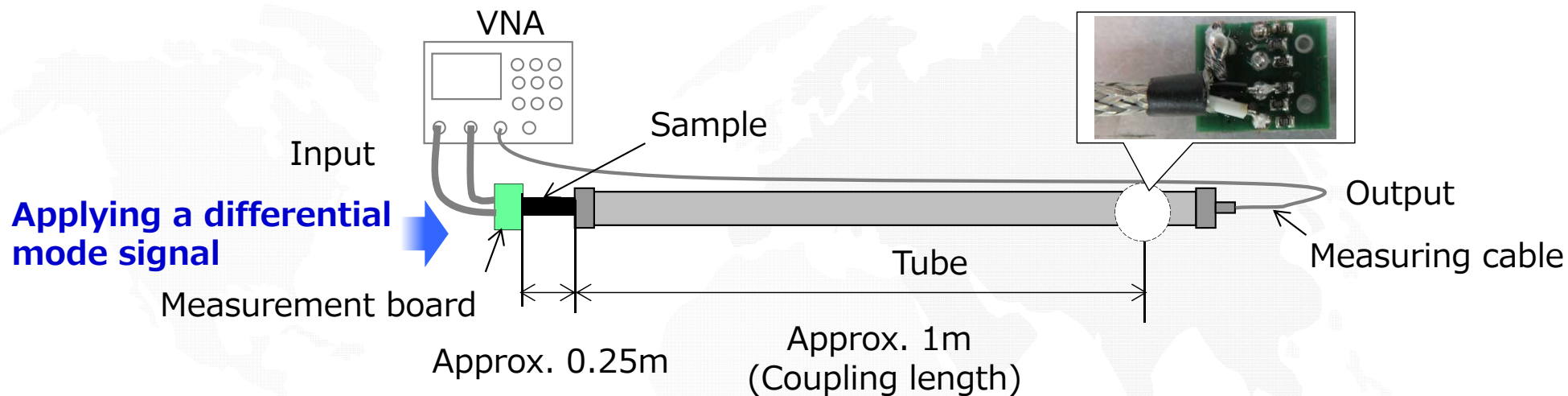


Wienckowski  
Jan.2018

- Proposed line is satisfied up to 3GHz
- 3GHz and more are possible to be beyond limit line if manufacture variation is considered

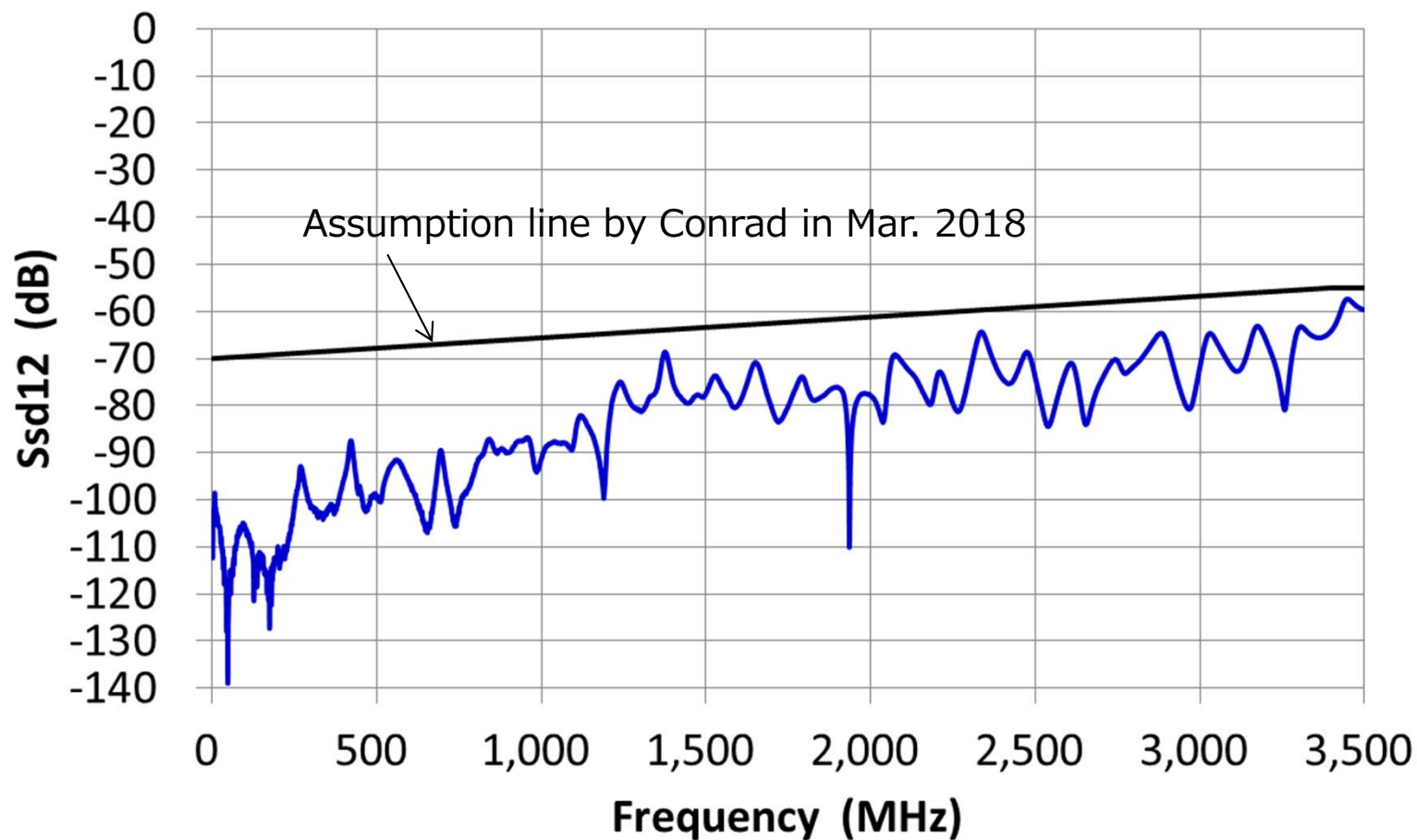
# 3 Measurement system of coupling attenuation

Coupling attenuation(balanced cables), Triaxial method

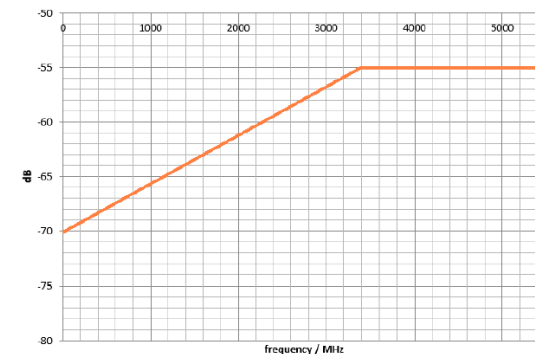


# 4 Measurement result of coupling attenuation

## Coupling attenuation



802.3ch NGAUTO  
Input Data – Assumption on Coupling Attenuation



Zerna  
Mar.2018

• Assumption line is satisfied up to 3.5 GHz



**END**  
Thank you for your attention



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