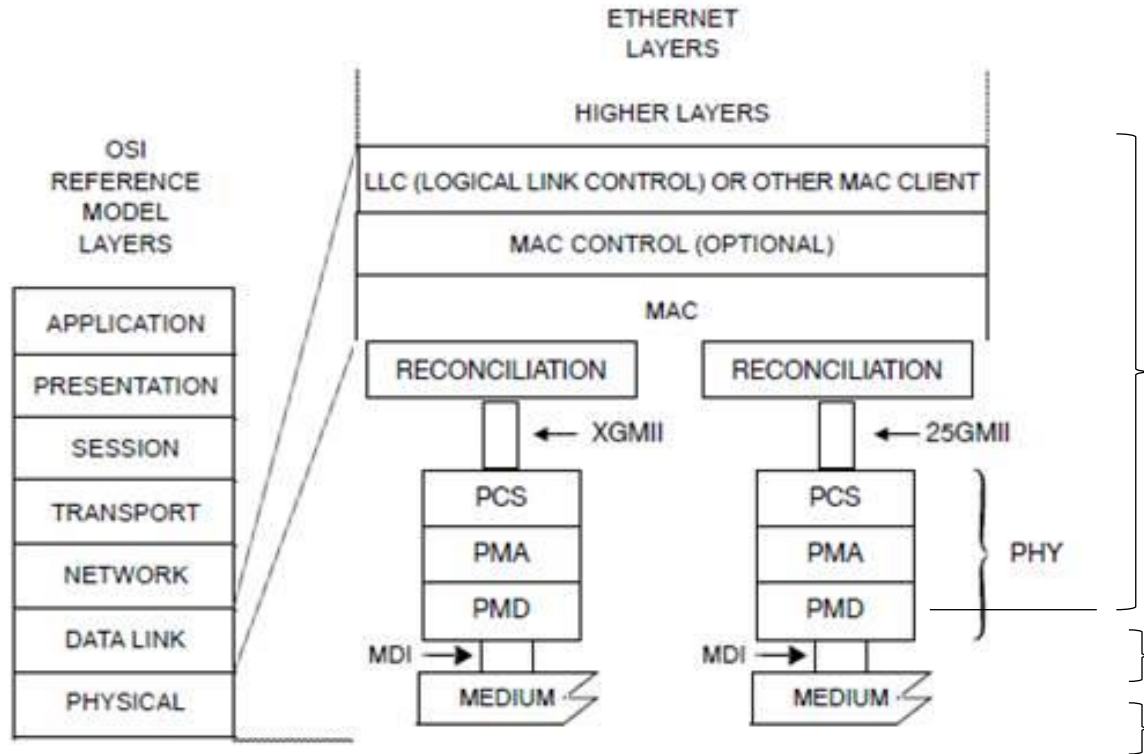


# Move forward

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# PCS/PMA/PMD for 802.3dh



802.3czD3.2 is confirmed to be submitted to Revcom on Jan. 17<sup>th</sup>.

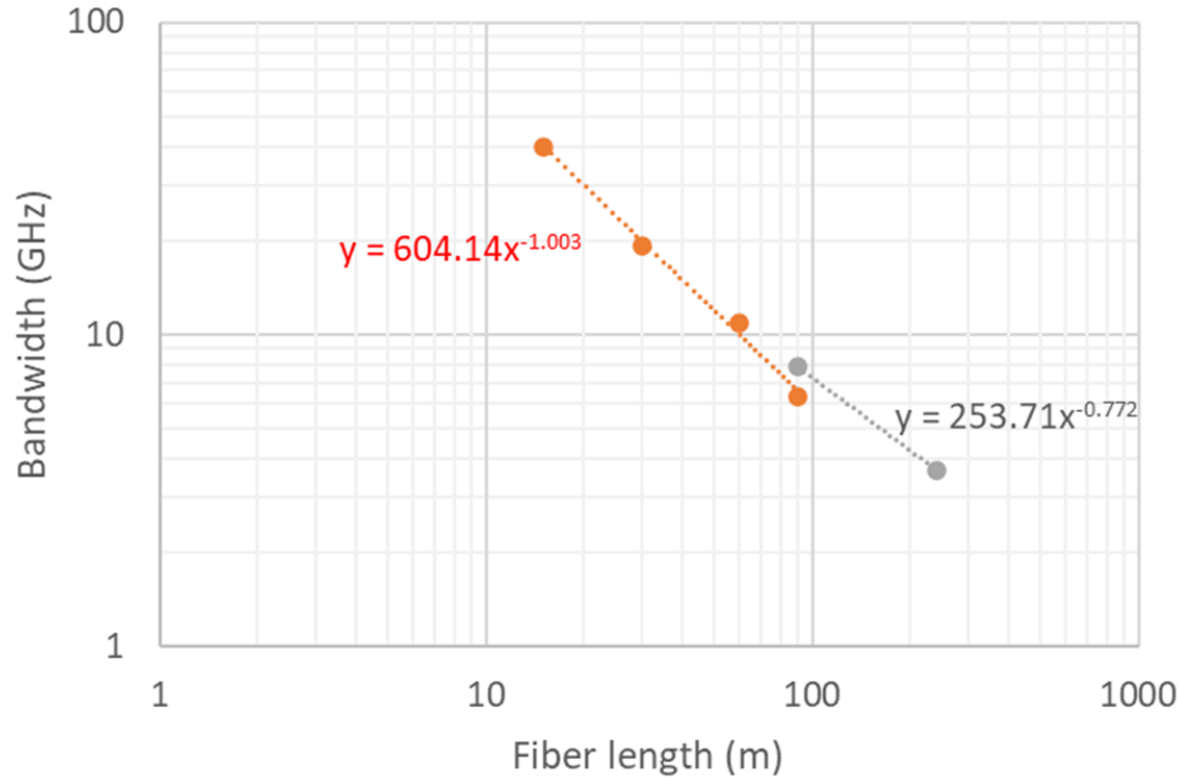
If no more new proposal for 802.3dh PCS/PMA, the 802.3dh chair would like to re-use 802.3cz for 802.3dh except wavelength

Keep discussion

A4j

MAC = MEDIA ACCESS CONTROL  
MDI = MEDIUM DEPENDENT INTERFACE  
PCS = PHYSICAL CODING SUBLAYER  
PHY = PHYSICAL LAYER DEVICE  
PMA = PHYSICAL MEDIUM ATTACHMENT  
PMD = PHYSICAL MEDIUM DEPENDENT  
XGMII = 10 GIGABIT MEDIA INDEPENDENT INTERFACE  
25GMII = 25 GIGABIT MEDIA INDEPENDENT INTERFACE

# Example 1 of bandwidth of GI-POF(A4i)



**Frequency domain:  
EF launch**

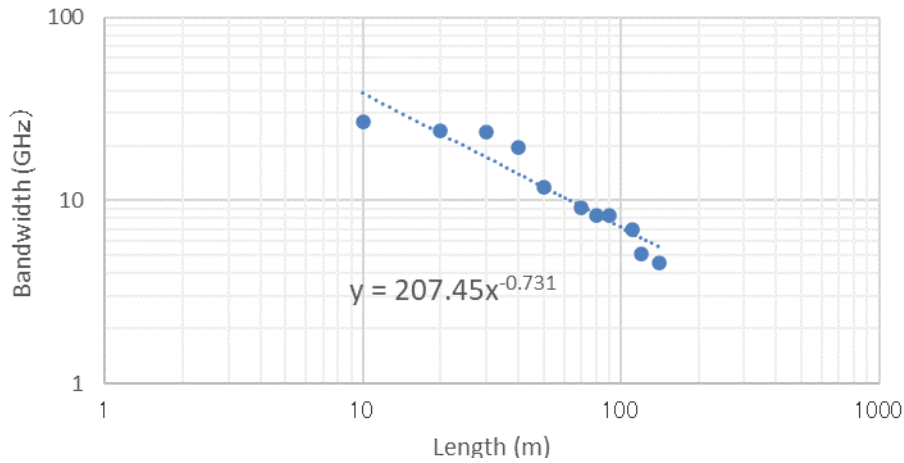
**Time domain:  
OFL launch**

● Frequency domain    ● Time domain

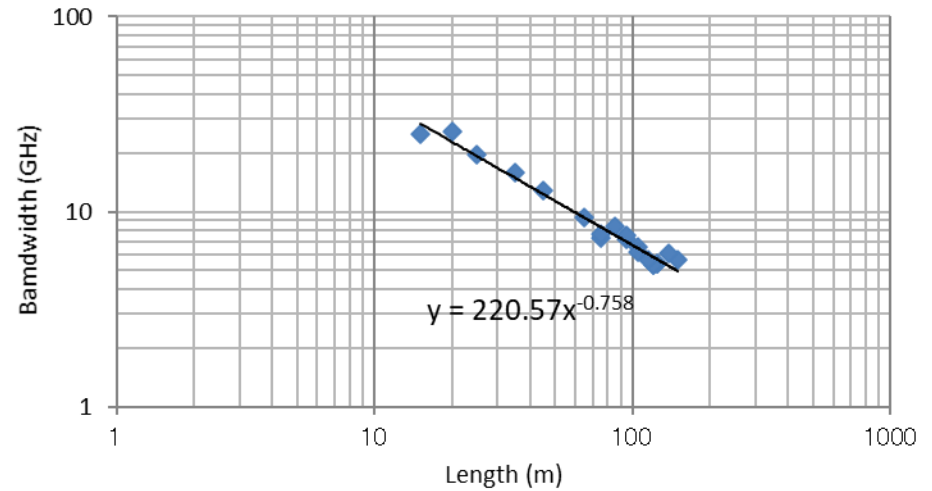
[https://www.ieee802.org/3/cz/public/jan\\_2022/watanabe\\_3cz\\_01\\_0122\\_Bandwidth\\_gipof\\_short\\_length.pdf](https://www.ieee802.org/3/cz/public/jan_2022/watanabe_3cz_01_0122_Bandwidth_gipof_short_length.pdf)

# Example 2 of bandwidth of GI-POF(A4i)

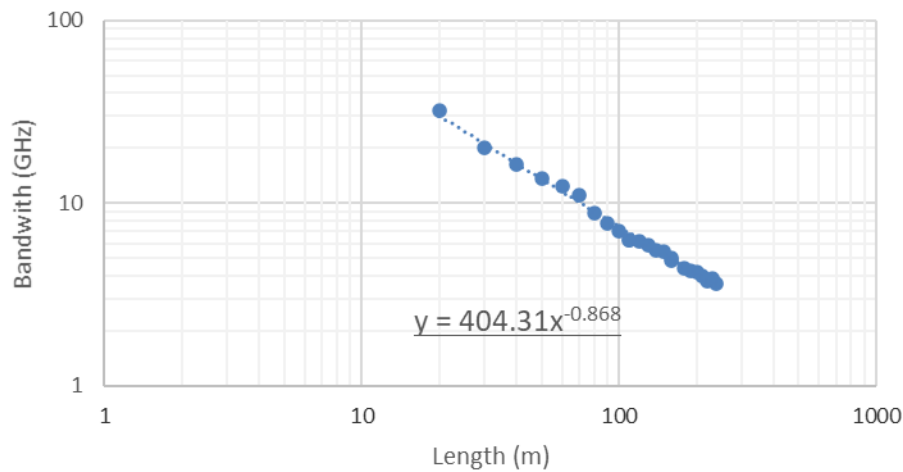
Sample A



Sample B

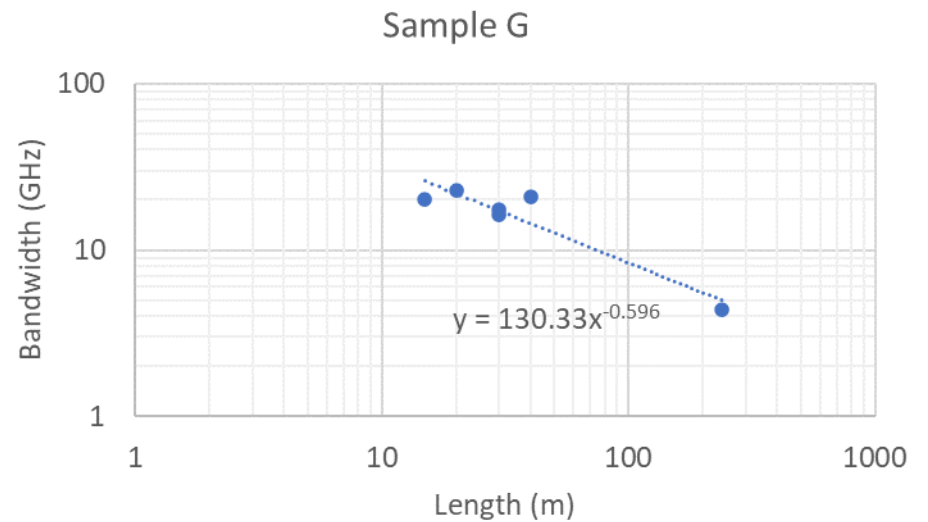
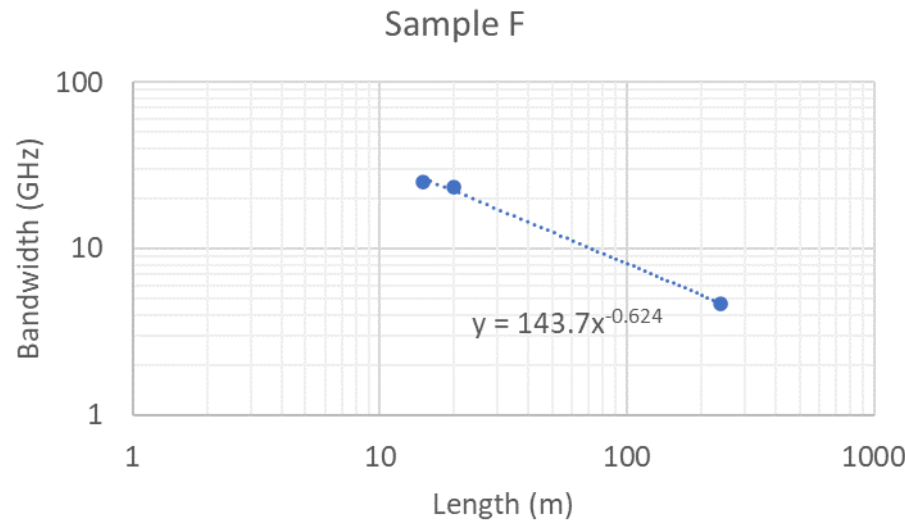
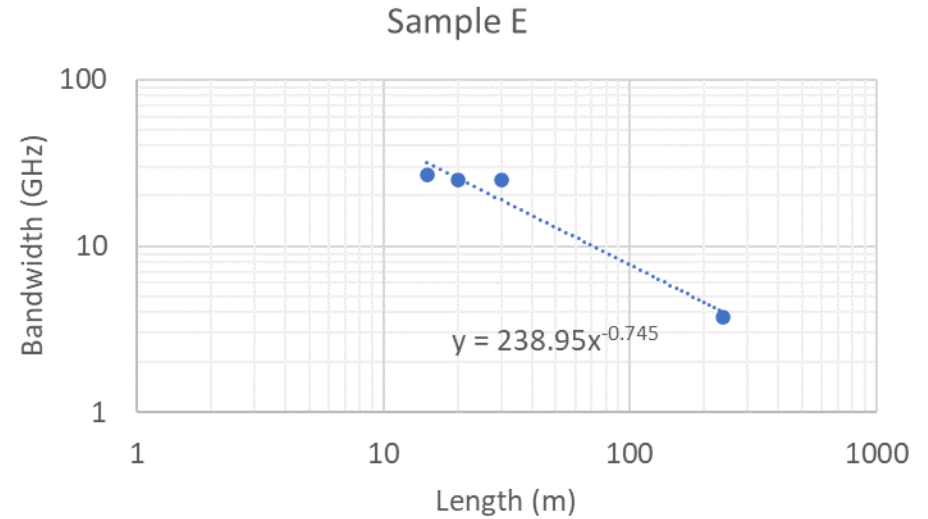
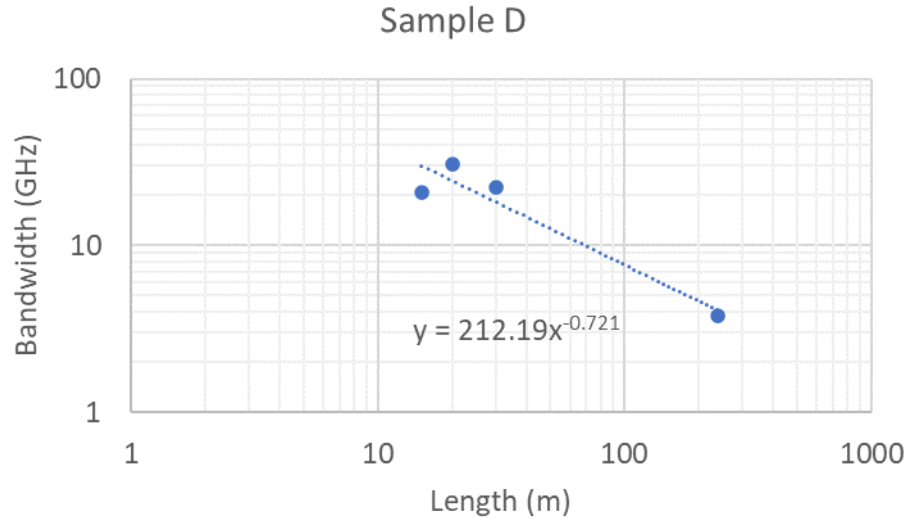


Sample C



**Time domain:  
OFL launch**

# Example 3 of bandwidth of GI-POF(A4i)



- **Bandwidth vs. length relationship was investigated with different manufacturing lot of GI-POF (A4i)  $BW \sim L^{-\gamma}$**
- **$\gamma$  showed 0.6 ~ 0.9 with OFL launch**
- **Because  $\gamma$  tend to decrease in very short length (<30 m), it is not a wise way to extrapolate the bandwidth at short length from the bandwidth measured with longer fiber. The bandwidth should be defined at short length (ex. 15m) for automobile application.**