

Suggestion on grid spacing of 400GbE

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Outline

- Summary of grid spacing for 400GbE in the past conferences
- Advantages of 75GHz spacing
- 75GHz Filter Data
- Recommendation

Summary of grid spacing for 400GbE in the past conferences

IEEE 802 July 2019 Plenary Interim:

Straw Poll #3

I am interested in hearing more information related to supporting a 75 GHz grid spacing for 400 GbE

Y: 26

N: 6

IEEE 802.3 September 2019 Interim:

Strawpoll #2

- For the grid for 400 GbE objective I would support
 - A. Keeping the currently adopted 100 GHz spacing only
 - B. Add 75 GHz spacing to currently adopted 100 GHz spacing
 - C. Replacing the 100 GHz spacing with 75 GHz spacing
 - D. Need more information

• Results

A. 1

B. 17

C. 6

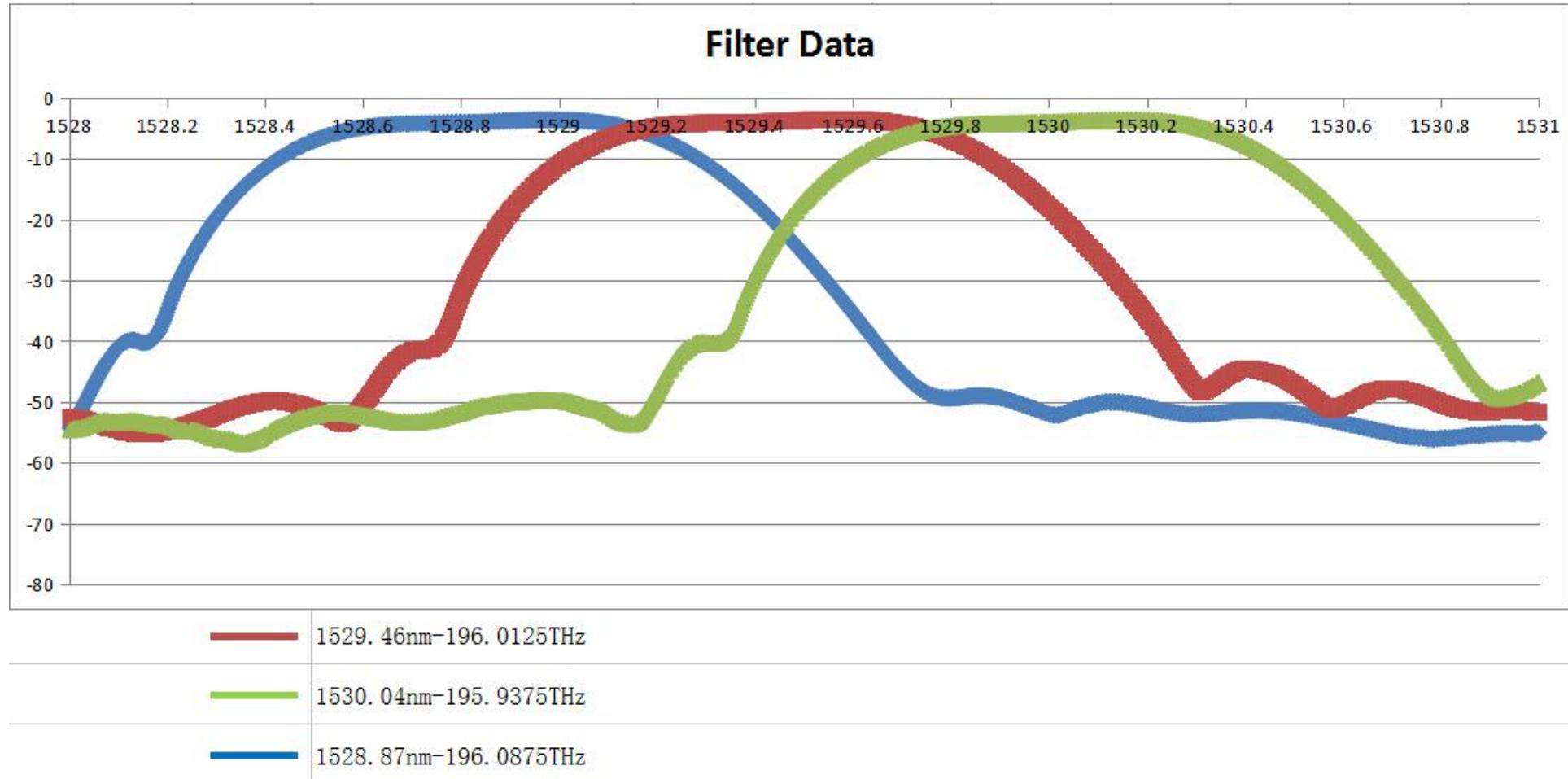
D. 23

Advantages of 75GHz spacing for 400GbE

Advantages:

- Select the 75GHz spacing for 400GbE to improve the frequency efficiency compared with 100GHz spacing
- Has broad market potential for 400Gb/s DWDM Ethernet over 75GHz spacing, and it can provide more capacity and more channels
- By investigating three optical module manufacturers, we have obtained that AWG solution of 75GHz spacing for 400GbE is available currently. Compared with the WSS solution, the cost is reduced considerably, which is helpful for 75GHz spacing.

75GHz Filter Data of one optical module manufacturer



Recommendation

Suggest adding 75GHz grid spacing to currently adopted 100GHz grid spacing, that means a single phy supports both grid spacings.

Thanks!