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Adding charts comments against 802.3cu D2.1 #10, 11 (updated)

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IEEE P802.3cu 100 Gb/s and 400 Gb/s over SMF at 100 Gb/s per Wavelength Task Force

Content of comments #10 and #11

Technical	44	140.6.3	43	It would be helpful to add a graph showing how OMAouter and RS vary with TDECQ and TECQ respectively.	Insert two graphs after Table 140-8 for 100GBASE-FR1 and 100GBASE-LR1, each showing the variation of Tx OMAouter and RS against TDECQ and TECQ respectively. A presentation in support of this comment will show the form of the two graphs.
Technical	67	151.7.3	27	It would be helpful to add a graph showing how OMAouter and RS vary with TDECQ and TECQ respectively.	Insert two graphs after Table 151-9 for 400GBASE-FR4 and 400GBASE-LR4-6, each showing the variation of Tx OMAouter and RS against TDECQ and TECQ respectively. A presentation in support of this comment will show the form of the two graphs.

Background to this updated presentation

- At the teleconference on 19-May-2020, a straw poll was taken on the proposed remedy in comments #10, and #11.
  - Straw Poll #1: For the chart options in lewis_3cu_01_051920.pdf do you prefer:
    A. As per Comment response (one chart with Tx & Rx per PMD)
    B. Only Alternative A (All Tx on one chart and all Rx on another chart)
    C. Only Alternative B (Everything on one chart -- Tx & Rx)
    D. Implement both items A) & B) above
    Results----- A: 7 B: 8 C: 4 D: 7
    40 people on the call 14 no responses.

- The original presentation included examples of option A charts
- This presentation includes example charts for options B and D

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New figure after Table 140-6 [values from D2.1]

Insert the new Figure 140-2a and text as below:

The values for OMA_{outer} (min) in Table 140–6 vary with TDECQ. The relationships are illustrated in Table 140–2a along with the values for OMA_{outer} (max).
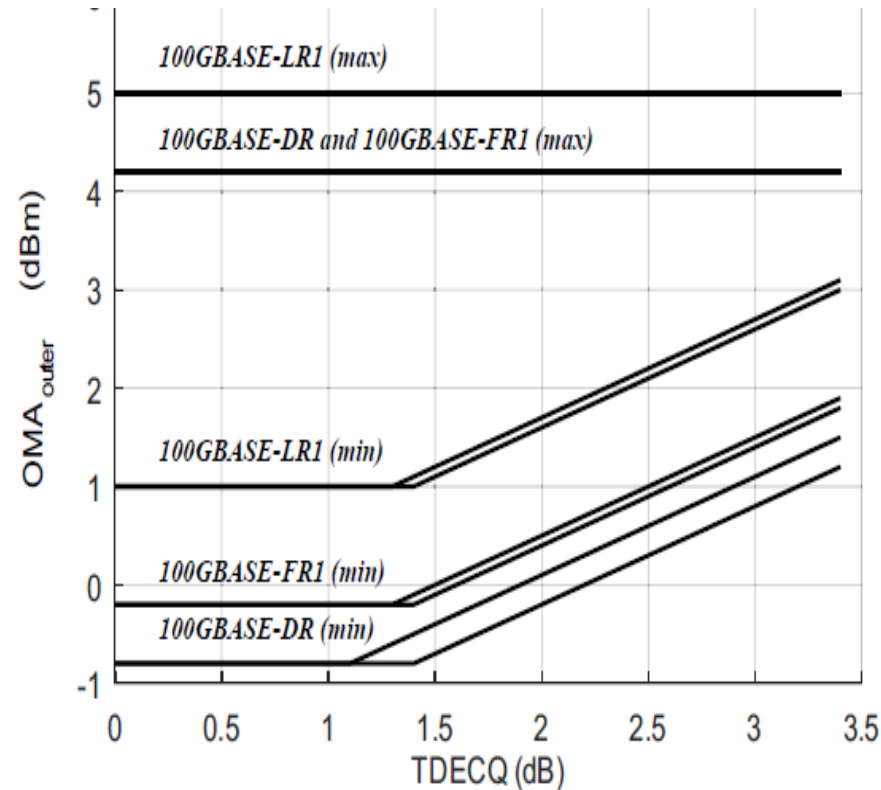

Figure 140–2a—Illustration of OMAouter (max) and OMAouter (min) versus TDECQ for 100GBASE-DR, 100GBASE-FR1 and 100GBASE-LR1

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New figure after Table 140-7 [values from D2.1]

Insert the new figure 140-2b and introductory text as below:

The values for receiver sensitivity (OMAouter) (max) in Table 140–7 vary depending on the value of TECQ for the test source used for measurement. Figure 140–2b illustrates this.
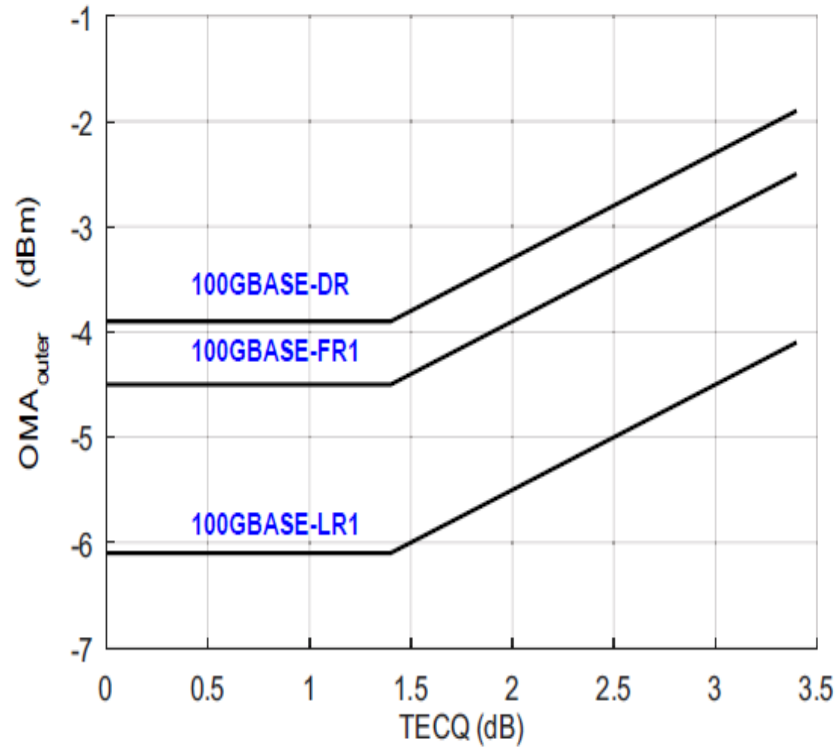
Figure 140–2b—Illustration of receiver sensitivity (OMA$_{outer}$) (max) for 100GBASE-DR, 100GBASE-FR1 and 100GBASE-LR1.

New figure after Table 140-8 [values from D2.1]

Insert new figure 140-2c and text as below:

The illustrative link power budget values in Table 140–8 are shown graphically for 100GBASE-FR1 in Table 140–2c.
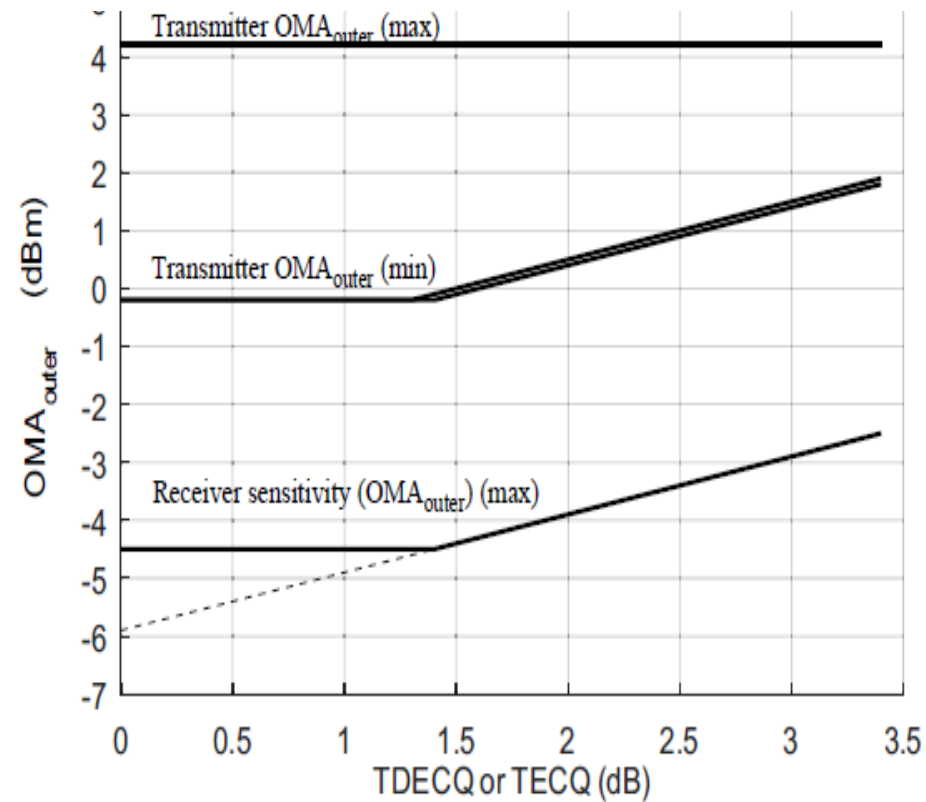

Figure 140–2c—Illustrative link power budget for 100GBASE-FR1

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Summary

- Following a straw poll on 19-May-2020, this presentation shows
  - a single figure for transmitter OMA_{outer} (min) and OMA_{outer} (max) for the three PMDs in clause 140
  - a single figure for receiver sensitivity (OMA_{outer}) (max) for the three PMDs in clause 140
  - a single figure for the illustrative link power budget of 100GBASE-FR1

- If this approach is satisfactory for the Task Force, I will prepare similar figures for clause 151.

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