

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 167 SC Table 167-7 P51 L27 # 1 [REDACTED]  
 Swanson, Steven Corning Incorporated  
 Comment Type **E** Comment Status **X**  
 The TDECQ is the same for both variants.  
 SuggestedRemedy  
 Merge cells.  
 Proposed Response Response Status **O**

Cl 167 SC Table 167-7 P51 L29 # 2 [REDACTED]  
 Swanson, Steven Corning Incorporated  
 Comment Type **E** Comment Status **X**  
 The TECQ is the same for both variants.  
 SuggestedRemedy  
 Merge cells.  
 Proposed Response Response Status **O**

Cl 167 SC Table 167-7 P51 L43 # 3 [REDACTED]  
 Swanson, Steven Corning Incorporated  
 Comment Type **ER** Comment Status **X**  
 Encircled flux is a requirement for the transmitter.  
 SuggestedRemedy  
 Replace:  
 "b  
 If measured into type A1a.2 or type A1a.3, or A1a.4, 50 µm fiber, in accordance with IEC 61280-1-4."  
 with:  
 "b  
 When measured into type A1a.2 or type A1a.3, or A1a.4, 50 µm fiber, in accordance with IEC 61280-1-4."  
 Proposed Response Response Status **O**

Cl 167.1 SC Table 167-15 P62 L44 # 4 [REDACTED]  
 Swanson, Steven Corning Incorporated  
 Comment Type **ER** Comment Status **X**  
 Amendment 1 to IEC 60793-2-10 will be published before 802.3db. Therefore, there is no need for footnote "f."  
 SuggestedRemedy

Delete footnote "f;" the amendment to IEC 60793-2-10 just updates the specification to reflect improvements in the measurement of the chromatic dispersion of the OM3, OM4 and OM5 fibers - the specified values for zero dispersion wavelength and the chromatic dispersion slope are still conservative values for all three fiber types. OM3 and OM4 fibers compliant to previous versions of IEC 60793-2-10 are fully compliant to the revised specification and there is no need for footnote "f."  
 Proposed Response Response Status **O**

Cl 167 SC 167.10.2.2.2 P63 L6 # 5 [REDACTED]  
 Swanson, Steven Corning Incorporated  
 Comment Type **TR** Comment Status **X**  
 The maximum discrete reflectance is only specified for PC connectors; we need to include a specification for APC connectors  
 SuggestedRemedy  
 Replace:  
 "The maximum discrete reflectance shall be less than -20 dB."  
 with:  
 "The maximum discrete reflectance shall be less than -20 dB for PC connectors and -35 dB for APC connectors"  
 Proposed Response Response Status **O**

Cl FM SC FM P1 L27 # 6 [REDACTED]  
 Parsons, Earl CommScope  
 Comment Type **E** Comment Status **X**  
 802.3ct and 802.3cp have been added to D2.1 of 802.3dc  
 SuggestedRemedy  
 Include 802.3ct-2021 and 802.3cp in this list  
 Proposed Response Response Status **O**

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl **FM** SC **FM** P1 L37 # 7  
 Parsons, Earl CommScope  
 Comment Type **E** Comment Status **X**  
 Should say Working Group instead of Task Force. Do we need to say ballot instead of review  
 SuggestedRemedy  
 Correct  
 Proposed Response Response Status **O**

Cl **FM** SC **FM** P12 L1 # 10  
 Parsons, Earl CommScope  
 Comment Type **E** Comment Status **X**  
 Extra blank page  
 SuggestedRemedy  
 remove  
 Proposed Response Response Status **O**

Cl **FM** SC **FM** P9 L17 # 8  
 Parsons, Earl CommScope  
 Comment Type **E** Comment Status **X**  
 D2.1 of 802.3dc moved sentence starting with "The title was changed..." to the end of paragraph and added "and the ability to use an EtherType to specify the MAC client protocol were "  
 SuggestedRemedy  
 Update this paragraph to match latest draft of 802.3dc  
 Proposed Response Response Status **O**

Cl **1** SC **1.4.136a** P19 L1 # 11  
 Parsons, Earl CommScope  
 Comment Type **E** Comment Status **X**  
 Extra blank page  
 SuggestedRemedy  
 remove  
 Proposed Response Response Status **O**

Cl **FM** SC **FM** P10 L36 # 9  
 Parsons, Earl CommScope  
 Comment Type **E** Comment Status **X**  
 Changes were made in D2.1 of 802.3dc  
 SuggestedRemedy  
 Update this paragraph to match latest draft of 802.3dc  
 Proposed Response Response Status **O**

Cl **78** SC **78.1.4** P25 L51 # 12  
 Parsons, Earl CommScope  
 Comment Type **E** Comment Status **X**  
 Footnote shouldn't be underlined  
 SuggestedRemedy  
 remove underline  
 Proposed Response Response Status **O**

Cl **78** SC **78.1.4** P26 L1 # 13  
 Parsons, Earl CommScope  
 Comment Type **E** Comment Status **X**  
 Extra blank page  
 SuggestedRemedy  
 remove  
 Proposed Response Response Status **O**

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 80 SC 80.1.1 P28 L10 # 14  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Fix cross reference  
 SuggestedRemedy  
 change "Clause 167" to "167"  
 Proposed Response Response Status O

Cl 91 SC 91.7.4.2 P33 L43 # 18  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Change cross reference  
 SuggestedRemedy  
 Switch to external cross reference to Clause 91.5.3.3  
 Proposed Response Response Status O

Cl 91 SC 91.7.3 P32 L27 # 15  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Change cross reference  
 SuggestedRemedy  
 Switch to external cross reference to Clause 91.5.3.3.1  
 Proposed Response Response Status O

Cl 91 SC 91.7.4.2 P34 L5 # 19  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Change cross reference  
 SuggestedRemedy  
 Switch to external cross reference to Clause 91.5.3.3  
 Proposed Response Response Status O

Cl 91 SC 91.7.4.1 P33 L12 # 16  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Change cross reference  
 SuggestedRemedy  
 Switch to external cross reference to Clause 91.5.2.7  
 Proposed Response Response Status O

Cl 116 SC 116 P36 L32 # 20  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Fix cross reference  
 SuggestedRemedy  
 change "Clause 167" to "167"  
 Proposed Response Response Status O

Cl 91 SC 91.7.4.2 P33 L32 # 17  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Change cross reference  
 SuggestedRemedy  
 Switch to external cross reference to Clause 91.5.3.3  
 Proposed Response Response Status O

Cl 116 SC 116.1.4 P37 L18 # 21  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Fix cross reference  
 SuggestedRemedy  
 change "Clause 167" to "167"  
 Proposed Response Response Status O

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 116 SC 116.1.4 P37 L23 # 22  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 SR4.2 shouldn't be underlined  
 SuggestedRemedy  
 remove underline from 400GBASE-SR4.2  
 Proposed Response Response Status O

Cl 167 SC 167.1 P42 L39 # 26  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Change cross reference  
 SuggestedRemedy  
 Switch to internal cross reference to Clause 116  
 Proposed Response Response Status O

Cl 167 SC 167.1 P41 L16 # 23  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Change cross reference  
 SuggestedRemedy  
 Switch to internal cross reference to Clause 45  
 Proposed Response Response Status O

Cl 167 SC 167.1 P42 L39 # 27  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Change cross reference  
 SuggestedRemedy  
 Switch to internal cross reference to 116.2  
 Proposed Response Response Status O

Cl 167 SC 167.1 P42 L37 # 24  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Change cross reference  
 SuggestedRemedy  
 Switch to internal cross reference to Clause 81  
 Proposed Response Response Status O

Cl 167 SC 167.1 P42 L43 # 28  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Change cross reference  
 SuggestedRemedy  
 Switch to internal cross reference to Clause 78  
 Proposed Response Response Status O

Cl 167 SC 167.1 P42 L38 # 25  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Change cross reference  
 SuggestedRemedy  
 Switch to internal cross reference to 80.2  
 Proposed Response Response Status O

Cl 167 SC 167.1 P42 L46 # 29  
 Parsons, Earl CommScope  
 Comment Type E Comment Status X  
 Change cross reference  
 SuggestedRemedy  
 Switch to internal cross reference to Clause 1  
 Proposed Response Response Status O

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 167 SC 167.1 P43 L13 # 30  
 Parsons, Earl CommScope  
 Comment Type **E** Comment Status **X**  
 Diagram has some issues  
 SuggestedRemedy  
 Fix box alignment between GMII and PCS boxes  
 Proposed Response Response Status **O**

Cl 00 SC 0 P13 L2 # 34  
 Ghiasi, Ali Ghiasi Quantum/Marvell  
 Comment Type **ER** Comment Status **X**  
 Page hyperlink is not working  
 SuggestedRemedy  
 Please fix the hyperlink to page#  
 Proposed Response Response Status **O**

Cl 167 SC 167.3.2.1 P45 L33 # 31  
 Parsons, Earl CommScope  
 Comment Type **E** Comment Status **X**  
 Change cross reference  
 SuggestedRemedy  
 Switch to internal cross reference to Clause 116.5  
 Proposed Response Response Status **O**

Cl 00 SC 0 P0 L2 # 35  
 Ghiasi, Ali Ghiasi Quantum/Marvell  
 Comment Type **ER** Comment Status **X**  
 Hyperlink to from sidebar table of content not working  
 SuggestedRemedy  
 Please sidebar hyperlink  
 Proposed Response Response Status **O**

Cl 167 SC 167.3.2.1 P45 L52 # 32  
 Parsons, Earl CommScope  
 Comment Type **E** Comment Status **X**  
 Change cross reference  
 SuggestedRemedy  
 Switch to internal cross reference to Clause 45  
 Proposed Response Response Status **O**

Cl 167 SC 167.7.1 P52 L23 # 36  
 Ghiasi, Ali Ghiasi Quantum/Marvell  
 Comment Type **TR** Comment Status **X**  
 Receiver reflectance of -12 combined with -20 dB results in much larger reflection than transmitter may tolerate, 2 connectors at 20 dB result in 14 dB RL, 3 connectors result in 10.7 dB, and 4 connectors in 8.4 dB.  
 SuggestedRemedy  
 One option is to increase cable plant RL to 26 dB but that require possibly replacing cable plant, simpler option is to require 20 dB RL for the receiver and keep the current 12 dB tolerance for the transmitter.  
 Proposed Response Response Status **O**

Cl 167 SC 167.10.2.2 P62 L40 # 33  
 Parsons, Earl CommScope  
 Comment Type **T** Comment Status **X**  
 Footnote e is too long  
 SuggestedRemedy  
 streamline the EMB information in this table and footnote  
 Proposed Response Response Status **O**

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 00 SC 0 P14 L14 # 37

Ghiasi, Ali Ghiasi Quantum/Marvell

Comment Type ER Comment Status X

Incorrect title for 167, Physical Medium Dependent (PMD) sublayer and medium, type 100GBASE-VR1, 200GBASE-VR2, 23 400GBASE-VR4, 100GBASE-SR1, 200GBASE-SR2, and 400GBASE-SR441

SuggestedRemedy

Please repalce 441 with 4

Proposed Response Response Status O

Cl 167 SC 167 P41 L2 # 38

Ghiasi, Ali Ghiasi Quantum/Marvell

Comment Type ER Comment Status X

The dash between the PMDs is missing

SuggestedRemedy

Please repalce 100GBASE VR1 with 100GBASE-VR1, etc. Why is the title in the table of content different that title on this page?

Proposed Response Response Status O

Cl 16 SC 16.7.1 P51 L24 # 39

Ghiasi, Ali Ghiasi Quantum/Marvell

Comment Type TR Comment Status X

Still having problem to display symbols using Apple Preview

SuggestedRemedy

Please correct when there is a fix from Adobe

Proposed Response Response Status O

Cl 167 SC 167.7.2 P53 L44 # 40

Ghiasi, Ali Ghiasi Quantum/Marvell

Comment Type TR Comment Status X

It was shown that TDECQ with MMSE is accurate and reduce test time and associated test cost.

[https://www.ieee802.org/3/db/public/September-09-September-29-2021/ghiasi\\_802.3db\\_01\\_092321.pdf](https://www.ieee802.org/3/db/public/September-09-September-29-2021/ghiasi_802.3db_01_092321.pdf)

SuggestedRemedy

MMSE is representative of real receiver and a full grid search may produce results slightly better, as shown by in Ghiasi contribution there is excellent correlation for scope measurements. MMSE will reduce test time specillay given 802.3db reference receiver is 9 taps will longer to do full grid search and will increase test cost.

Proposed Response Response Status O

Cl 16 SC 16.7.2 P52 L25 # 41

Ghiasi, Ali Ghiasi Quantum/Marvell

Comment Type TR Comment Status X

Still having problem to display symbols using Apple Preview

SuggestedRemedy

Please correct when there is a fix from Adobe

Proposed Response Response Status O

Cl 167 SC 167.8.13.1 P59 L46 # 42

Maguire, Valerie The Siemon Company

Comment Type T Comment Status X

LB is identified as an upper frequency bound, but it's not clear what the units are

SuggestedRemedy

Replace, "LB = loop bandwidth; upper frequency bound..." with, "LB = loop bandwidth (MHz); upper frequency bound..."

Proposed Response Response Status O

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

CI 167 SC 167.10.2.2 P62 L40 # 43

Lingle, Robert

OFS

Comment Type T Comment Status X

Footnote e of Table 167-15 contains excessively detailed information about fiber bandwidths, well beyond what is necessary for the reader to understand the standard and implement it. This information in should be available in contributions presented to the TF during standards development, and that should be sufficient for someone wishes to delve into the rationale for the fiber emulation filter bandwidth values prescribed in Table 167-12.

SuggestedRemedy

Replace footnote e of Table 167-15 with "Effective modal bandwidth guidance is provided at all wavelengths in the 840 nm to 953 nm range in IEC 60793-2-10. OM5 multimode fiber has the same minimum bandwidth as OM4 at 850nm but is specified to have improved minimum bandwidth for wavelengths longer than 850nm."

Proposed Response Response Status O

CI 167 SC 167.8.5 P57 L33 # 44

Lingle, Robert

OFS

Comment Type E Comment Status X

Editor's note states: "Use of minimum mean squared error optimization in place of optimization of TDECQ has been proposed." This topic has had a presentation in TF & discussion in TF and offline. Whatever the TF decides during comment resolution on D2.0, I think the Editor's Note has served its purpose (of stimulating consideration) and should be removed at this point.

SuggestedRemedy

Remove this editor's note

Proposed Response Response Status O

CI FM SC FM P12 L1 # 45

Wienckowski, Natalie

General Motors

Comment Type E Comment Status X

blank page

SuggestedRemedy

Remove the blank page.  
Also remove blank pages 19, 26,

Proposed Response Response Status O

CI 45 SC 45.2.1.6 P21 L27 # 46

Wienckowski, Natalie

General Motors

Comment Type E Comment Status X

an unchanged row is shown as new

SuggestedRemedy

Delete from this draft: 1 1 1 1 0 0 0 = 50GBASE-BR40-U

Proposed Response Response Status O

CI 45 SC 45.2.1.6 P21 L26 # 47

Wienckowski, Natalie

General Motors

Comment Type E Comment Status X

deleted text has to be shown in strikethrough

SuggestedRemedy

Add "reserved" in strikethrough  
1 1 1 1 0 0 1 = "reserved" 100GBASE-VR1 PMA/PMD

Proposed Response Response Status O

CI 45 SC 45.2.1.6 P21 L25 # 48

Wienckowski, Natalie

General Motors

Comment Type E Comment Status X

deleted text has to be shown in strikethrough

SuggestedRemedy

Add in strikethrough "1 1 1 1 0 1 x = reserved"

Proposed Response Response Status O

CI 00 SC 0 P L # 49

Wienckowski, Natalie

General Motors

Comment Type T Comment Status X

SuggestedRemedy

1 1 1 1 1 x x = reserved

Proposed Response Response Status O

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 45 SC 45.2.1.6 P21 L23 # 50  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 deleted text has to be shown in strikethrough  
 SuggestedRemedy  
 Add in strikethrough "1 1 1 1 x x = reserved"  
 Proposed Response Response Status O

Cl 167 SC 167.1 P42 L39 # 54  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Clause 116 is included in this draft  
 SuggestedRemedy  
 Change Clause 116 to "black" and make it a hyperlink.  
 Proposed Response Response Status O

Cl 116 SC 116.4 P38 L14 # 51  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 existing text doesn't match P8023\_D2p1\_ALL\_SECTIONS.pdf  
 SuggestedRemedy  
 Change "8192" to "8 192"  
 on L 21 change "4096" to "4 096".  
 Proposed Response Response Status O

Cl 167 SC 167.1 P42 L43 # 55  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Clause 78 is included in this draft  
 SuggestedRemedy  
 Change Clause 78 to "black".  
 Proposed Response Response Status O

Cl 167 SC 167.1 P42 L37 # 52  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Clause 80 is included in this draft  
 SuggestedRemedy  
 Change Clause 80 to "black".  
 Proposed Response Response Status O

Cl 167 SC 167.1 P42 L46 # 56  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Clause 1 is included in this draft  
 SuggestedRemedy  
 Change Clause 1 to "black".  
 Proposed Response Response Status O

Cl 167 SC 167.1 P42 L38 # 53  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Clause 80.2 is included in this draft  
 SuggestedRemedy  
 Change 80.2 to "black".  
 Proposed Response Response Status O

Cl 167 SC 167.3.1 P45 L21 # 57  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Clause 80.4 is included in this draft  
 SuggestedRemedy  
 Change 80.4 to "black".  
 Proposed Response Response Status O



EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 167 SC 167.3.1 P45 L21 # 58  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Hyperlink missing.  
 SuggestedRemedy  
 Make 116.4 a hyperlink.  
 Proposed Response Response Status O

Cl 167 SC 167.5.1 P46 L47 # 62  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Remove random word "in".  
 SuggestedRemedy  
 Change: all transmitter measurements and tests defined in are made at TP2.  
 To: all transmitter measurements and tests defined are made at TP2.  
 Proposed Response Response Status O

Cl 167 SC 167.3.2.1 P45 L33 # 59  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Clause 116.5 is included in this draft  
 SuggestedRemedy  
 Change 116.5 to "black" and make it a hyperlink.  
 Proposed Response Response Status O

Cl 167 SC 167.5.1 P47 L1 # 63  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Remove random word "in".  
 SuggestedRemedy  
 Change: all receiver measurements and tests defined in are made at TP3.  
 To: all receiver measurements and tests defined are made at TP3.  
 Proposed Response Response Status O

Cl 167 SC 167.4 P45 L48 # 60  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Clause 116.5 is included in this draft  
 SuggestedRemedy  
 Change 116.5 to "black" and make it a hyperlink.  
 Proposed Response Response Status O

Cl 167 SC 167.5.10 P49 L38 # 64  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Clause 45.2.1.7.4 is included in this draft  
 SuggestedRemedy  
 Change 45.2.1.7.4 to "black" and make it a hyperlink.  
 Proposed Response Response Status O

Cl 167 SC 167.4 P45 L53 # 61  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Clause 45 is included in this draft  
 SuggestedRemedy  
 Change Clause 45 to "black".  
 Proposed Response Response Status O

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

CI 167 SC 167.5.11 P49 L46 # 65  
 Wienckowski, Natalie General Motors  
 Comment Type E Comment Status X  
 Clause 45.2.1.7.5 is included in this draft  
 SuggestedRemedy  
 Change 45.2.1.7.5 to "black" and make it a hyperlink.  
 Proposed Response Response Status O

CI 167 SC 167.7 P50 L19 # 66  
 Wienckowski, Natalie General Motors  
 Comment Type TR Comment Status X  
 There is no objective for a 30m link. The VR links are specified to be 50m everywhere else in this draft.  
 SuggestedRemedy  
 Delete row: 0.5 m to 30 m for OM3  
 Proposed Response Response Status O

CI 167 SC 167.7 P50 L24 # 67  
 Wienckowski, Natalie General Motors  
 Comment Type TR Comment Status X  
 There is no objective for a 60m link. The SR links are specified to be 100m everywhere else in this draft.  
 SuggestedRemedy  
 Delete row: 0.5 m to 60 m for OM3  
 Proposed Response Response Status O

CI 167 SC 167.7.3 P53 L13 # 68  
 Wienckowski, Natalie General Motors  
 Comment Type TR Comment Status X  
 There is no objective for a 30m link. The VR links are specified to be 50m everywhere else in this draft.  
 There is no objective for a 60m link. The SR links are specified to be 100m everywhere else in this draft.  
 SuggestedRemedy  
 Delete OM3 columns in Table 167-9  
 Proposed Response Response Status O

CI 167 SC 167.9.1 P59 L54 # 69  
 Wienckowski, Natalie General Motors  
 Comment Type TR Comment Status X  
 Should refer to Annex J. IEC 60950-1 is obsolete.  
 SuggestedRemedy  
 Change: All equipment subject to this clause shall conform to IEC 60950-1.  
 To: All equipment meeting this standard shall conform to the general safety requirements as specified in J.2.  
 Proposed Response Response Status O

CI 167 SC 167.10.1 P61 L35 # 70  
 Wienckowski, Natalie General Motors  
 Comment Type TR Comment Status X  
 Remove reference to OM3 as it doesn't meet the project objectives.  
 SuggestedRemedy  
 Delete: As OM4 and OM5 optical fiber meet the requirements for OM3, a channel compliant to the "OM3" column may use OM4 or OM5 optical fiber, or a combination of OM3, OM4, and OM5.  
 Proposed Response Response Status O

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 167 SC 167.10.2.2 P62 L7 # 71  
 Wienckowski, Natalie General Motors  
 Comment Type **TR** Comment Status **X**  
 There is no objective for a 30m link. The VR links are specified to be 50m everywhere else in this draft.  
 There is no objective for a 70m link (not consistent). The SR links are specified to be 100m everywhere else in this draft.  
 SuggestedRemedy  
 Delete OM3 columns in Table 167-14  
 Proposed Response Response Status **O**

Cl 167 SC 167.10.2.2 P62 L25 # 72  
 Wienckowski, Natalie General Motors  
 Comment Type **TR** Comment Status **X**  
 Remove reference to OM3 as it doesn't meet the project objectives.  
 SuggestedRemedy  
 Delete OM3 columns in Table 167-15  
 Proposed Response Response Status **O**

Cl FM SC FM P1 L35 # 73  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type **E** Comment Status **X**  
 It seems unlikely you will go to SA ballot after 802.3cw. 802.3cw is still at d1p2.  
 SuggestedRemedy  
 Check with WG leadership for order of amendments and align this, and amendment descriptions on page s 10 & 11  
 Proposed Response Response Status **O**

Cl FM SC FM P1 L37 # 74  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type **E** Comment Status **X**  
 prepared for Task Force Review... this is for working group ballot  
 SuggestedRemedy  
 Change Task Force Review to Working Group Ballot.  
 Proposed Response Response Status **O**

Cl 1 SC 1.4.39a P18 L15 # 75  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type **E** Comment Status **X**  
 There is no "100GBASE-SR10 encoding" - it is just "100GBASE-SR10", AND, I think 100GBASE-SR1 should go before 100GBASE-SR10, which would be after "1.4.38 100GBASE-R encoding".  
 SuggestedRemedy  
 Change editing instruction to Insert the following new definition after 1.4.38 100GBASE-R encoding.  
 Renumber 1.4.39a to 1.4.38a  
 Proposed Response Response Status **O**

Cl 1 SC 1.4.104a P18 L32 # 76  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type **E** Comment Status **X**  
 Editing instruction says "new definitions" - I only see one.  
 SuggestedRemedy  
 Change "new definitions" to "new definition" in the editing instruction  
 Proposed Response Response Status **O**

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 30 SC 30.5.1.1.2 P20 L11 # 77

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M

Comment Type T Comment Status X

"ATTRIBUTE" is missing on line before APPROPRIATE SYNTAX:. Also, ATTRIBUTE should be at the indent occupied by APPROPRIATE SYNTAX, which would cause APPROPRIATE SYNTAX to line up with the indent of the added MAU types.

*SuggestedRemedy*

Insert ATTRIBUTE on new line before APPROPRIATE SYNTAX, with style and alignment as described.

Proposed Response Response Status O

Cl 45 SC 45.2.1.6 P21 L10 # 78

Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M

Comment Type E Comment Status X

"Change the indicated reserved rows" - there are no rows indicated to be changed. Further, Table 45-7 has 3 reserved rows. I suspect the one to be changed is the top-most, but it looks like the change needs to be more complicated. The reserved rows are:

1 1 1 x x x x = reserved

1 1 0 1 x x x = reserved

1 1 0 0 1 x x = reserved

but the added rows are indicated purely as inserts, creating double-definitions:

...

1 1 1 1 1 1 1 = reserved (with values 1111110 through 1111000 defined)

Also, I cannot find any reference to 50GBASE-BR40-U in the draft, or in another amendment - so I'm guessing this is an error or in an amendment coming later.

*SuggestedRemedy*

Change editing instruction to "Change the description of bits 1.7.6:0 in Table 45-7, as shown (unchanged rows not shown):

show in description, as below, <UL> indicates start of underline, <END UL> end of underline, <SO> and <END SO> start and end of strikeout, and text outside of that is just plain to show where the new text lies in the draft

"6 5 4 3 2 1 0

<UL> 1 1 1 1 1 1 1 = reserved

1 1 1 1 1 1 0 = 400GBASE-SR4 PMA/PMD

1 1 1 1 1 0 1 = 400GBASE-VR4 PMA/PMD

1 1 1 1 1 0 0 = 200GBASE-SR4 PMA/PMD

1 1 1 1 0 1 1 = 200GBASE-VR4 PMA/PMD

1 1 1 1 0 1 0 = 100GBASE-SR4 PMA/PMD

1 1 1 1 0 0 1 = 100GBASE-VR4 PMA/PMD <END UL>

<SO> 1 1 1 x x x x = reserved <END SO>

<UL> 1 1 1 1 0 0 0 = reserved

1 1 1 0 x x x = reserved <end UL>

1 1 0 1 x x x = reserved

...."

Proposed Response Response Status O

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 45 SC 45.2.1.7.4 P21 L43 # 79  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 167.5.10 should be an active cross reference, same comment for 167.5.11 in Table 45-10 and 167.5.7 in Table 45-12.  
 SuggestedRemedy  
 make locations in Tables 45-9, 45-10 and 45-12 active cross references  
 Proposed Response Response Status O

Cl 45 SC 45.2.1.22 P23 L9 # 80  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 "(as modified by IEEE Std 802.3cn-2019)" - if this is an amendment to the revision (802.3-2022), then modification by 802.3cn-2019 is not relevant or necessary.  
 SuggestedRemedy  
 Delete "(as modified by IEEE Std 8092.3cn-2019)" in editing instruction  
 Proposed Response Response Status O

Cl 45 SC 45.2.1.22 P23 L19 # 81  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 There is only one reserved bit - no need for a range  
 SuggestedRemedy  
 Change edit just to strike out ":12" (deleting the inserted 14, and striking out the colon as well)  
 Proposed Response Response Status O

Cl 45 SC 45.2.1.24 P23 L49 # 82  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 "insert the following new subclauses (Table 45.2.1.24.7 and Table 45.2.1.24.8) after 45.2.1.24.4" - these are subclauses, not tables, use correct cross-reference formatting so it just says (45.2.1.24.7 and 45.2.1.24.8) - also, put editing instruction AFTER Table 45-27.  
 SuggestedRemedy  
 See comment  
 Proposed Response Response Status O

Cl 80 SC 80.1.3 P27 L9 # 83  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 It appears "Clause 140" an external reference is somehow an active cross reference. No idea where it points...  
 SuggestedRemedy  
 See comment, make it not active.  
 Proposed Response Response Status O

Cl 80 SC 80.1.1 P28 L1 # 84  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 80.1.1 Should be 80.1.5  
 SuggestedRemedy  
 Change 80.1.1 to 80.1.5  
 Proposed Response Response Status O

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 80 SC 80.1.1 P28 L13 # 85  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 "Clause 167" column header is different than the others which just have numbers  
 SuggestedRemedy  
 Change "Clause 167" to "167" (as active xref)  
 Proposed Response Response Status O

Cl 167 SC 167.1 P41 L16 # 89  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 Clause 45 is marked external, even though it is an active cross reference and in the draft  
 SuggestedRemedy  
 Make clause 45 black and not marked external  
 Proposed Response Response Status O

Cl 116 SC 116.1.4 P36 L34 # 86  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 "Clause 167" column header is different than the others which just have numbers  
 SuggestedRemedy  
 Change "Clause 167" to "167" (as active xref)  
 Proposed Response Response Status O

Cl 167 SC 167.1 P41 L49 # 90  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 Clause 78 is marked external, even though it is an active cross reference and in the draft - also on page 42 in Table 167-2.  
 SuggestedRemedy  
 Make clause 78 black and not marked external ( 2 places)  
 Proposed Response Response Status O

Cl 116 SC 116.1.4 P37 L20 # 87  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 "Clause 167" column header is different than the others which just have numbers  
 SuggestedRemedy  
 Change "Clause 167" to "167" (as active xref) (2 places)  
 Proposed Response Response Status O

Cl 167 SC 167.5.10 P49 L38 # 91  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 45.2.1.7.4 is marked external even though it is in the draft  
 SuggestedRemedy  
 make 45.2.1.7.4 an active cross reference, not external, and black  
 Proposed Response Response Status O

Cl 167 SC 167 P41 L1 # 88  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 Missing editing instruction  
 SuggestedRemedy  
 Add editing instruction "Insert clause 167 after clause 166 as shown:"  
 Proposed Response Response Status O

Cl 167 SC 167.5.11 P49 L46 # 92  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type E Comment Status X  
 45.2.1.7.5 is marked external even though it is in the draft  
 SuggestedRemedy  
 make 45.2.1.7.5 an active cross reference, not external, and black  
 Proposed Response Response Status O

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

CI 167 SC 167.8.5 P56 L44 # 93  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type **TR** Comment Status **X**  
 Editor's note should not be indented as a list item - also, this is a note about a proposed substitution. The editor's note should be removed during working group ballot, prior to SA ballot.  
 SuggestedRemedy  
 Remove editor's note.  
 Proposed Response Response Status **O**

CI 167 SC 167.8.5 P56 L47 # 94  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type **E** Comment Status **X**  
 Table 167-12 should be on the same page - the headers are on one page and the body on the next. It's a short table  
 SuggestedRemedy  
 Fix page alignment so the table all goes on one page.  
 Proposed Response Response Status **O**

CI 167 SC 167.9.1 P59 L54 # 95  
 Zimmerman, George CME Consulting/ADI, APL Gp, Cisco, CommScope, M  
 Comment Type **TR** Comment Status **X**  
 IEC 60950-1 has been withdrawn. See IEEE 802.3-202x Annex J.  
 SuggestedRemedy  
 replace "conform with IEC 60950-1" with "shall conform to J.2"  
 Proposed Response Response Status **O**

CI 167 SC 167.10.2.2 P62 L8 # 96  
 Ferretti, Vince Corning  
 Comment Type **TR** Comment Status **X**  
 Table 167-14—Fiber optic cabling (channel) characteristics incorrectly calls out operating distance for OM3 fiber for SR lengths as 70 m  
 SuggestedRemedy  
 Change OM3 operating distance to 60 m to match operating distances in other sub-clauses  
 Proposed Response Response Status **O**

CI 167 SC 167.8.11 P58 L42 # 97  
 Nicholl, Gary Cisco Systems, Inc.  
 Comment Type **TR** Comment Status **X**  
 The spec requires 53.125GHz integration bandwidth for RIN, which is significantly higher than the receiver bandwidth. The high integration bandwidth is not needed and can make measurements expensive.  
 SuggestedRemedy  
 b) The upper -3 dB limit of the measurement apparatus is to be approximately 26.5625 GHz  
 Proposed Response Response Status **O**

CI 91 SC 91.5.3.3 P30 L12 # 98  
 Marris, Arthur Cadence Design Systems  
 Comment Type **E** Comment Status **X**  
 Change "100GBASE-DR PHY" to "100GBASE-DR" and the word "is" is missing on line 33  
 SuggestedRemedy  
 Change "100GBASE-DR PHY" to "100GBASE-DR" on lines 12, 22 and 34  
 Also change "When the RS-FEC sublayer used" to "When the RS-FEC sublayer is used"  
 Proposed Response Response Status **O**

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

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Cl 91 SC 91.6.3 P31 L4 # 99  
Marris, Arthur Cadence Design Systems  
Comment Type E Comment Status X  
Change "100GBASE-DR PMDs" to "100GBASE-DR"  
SuggestedRemedy  
Change "100GBASE-DR PMDs" to "100GBASE-DR"  
Proposed Response Response Status O

---

Cl 45 SC 45.2.1.21 P22 L37 # 100  
Lusted, Kent Intel Corporation  
Comment Type ER Comment Status X  
The 200G PMA/PMD extended ability bits 1.23.7 and 1.23.8 collide with P802.3ck  
SuggestedRemedy  
Move the bits to another location in the register  
Proposed Response Response Status O

---

Cl 45 SC 45.2.1.24 P24 L7 # 101  
Lusted, Kent Intel Corporation  
Comment Type ER Comment Status X  
The 40G/100G PMA/PMD extended ability register 2 bit 1.26.0 and 1.26.1 collide with P802.3ck  
SuggestedRemedy  
Move the bits to another location in the register  
Proposed Response Response Status O

---

Cl 167 SC 167.1 P41 L46 # 102  
Lusted, Kent Intel Corporation  
Comment Type TR Comment Status X  
Table 167-1 references Annex 120F and Annex 120G for the 100GAUI1 C2C and C2M.  
However, the ammendment order decree from David Law has 3ck publishing after 3db  
SuggestedRemedy  
Remove references to Annex 120F and Annex 120G in the document  
Proposed Response Response Status O

---

Cl FM SC FM P10 L29 # 103  
Ran, Adee Cisco  
Comment Type E Comment Status X  
The paragraph starting on line 29 should be part of the previous paragraph (Section Eight).  
Also, on line 130, a space is missing after "Clause 125".  
SuggestedRemedy  
Delete the paragraph break, insert space between "Clause 125" and "includes".  
Proposed Response Response Status O

---

Cl 00 SC 0 P12 L1 # 104  
Ran, Adee Cisco  
Comment Type E Comment Status X  
There are several blank pages in the draft (apparently at the end of clauses).  
SuggestedRemedy  
Delete the empty pages.  
Proposed Response Response Status O



EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

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Cl 1 SC 1.3 P18 L4 # 105  
Ran, Adee Cisco  
Comment Type E Comment Status X  
Nothing is inserted in this subclause.  
SuggestedRemedy  
Delete the subclause and editorial instruction, unless the next draft add some content.  
Proposed Response Response Status O

---

Cl 00 SC 0 P18 L14 # 106  
Ran, Adee Cisco  
Comment Type E Comment Status X  
Many editorial instructions in this draft appear as bookmarks in the bookmark pane, making navigation inconvenient.  
SuggestedRemedy  
Apply paragraph formatting for all editorial instructions to avoid them being treated as bookmarks.  
Proposed Response Response Status O

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Cl 45 SC 45.2.1.6 P21 L26 # 107  
Ran, Adee Cisco  
Comment Type E Comment Status X  
The line for 50GBASE-BR40-U appears in the base document (802.3dc D2.1) so should not be underlined.  
SuggestedRemedy  
Remove the underline.  
Proposed Response Response Status O

---

Cl 45 SC 45.2.1.21 P22 L37 # 108  
Ran, Adee Cisco  
Comment Type TR Comment Status X  
Bits 7 and 8 of register 1.23 have been assigned by 802.3ck (since D1.0, December 2019) and are not available.  
SuggestedRemedy  
Keep bits 8:7 reserved, and assign bits 10:9 instead (or others based on availability).  
Change 45.2.1.21.9 and 45.2.1.21.10 accordingly.  
Proposed Response Response Status O

---

Cl 45 SC 45.2.1.22 P23 L9 # 109  
Ran, Adee Cisco  
Comment Type E Comment Status X  
This draft is an amendment of 802.3dc-202x, so modifications by 802.3cn-2019 are already included.  
SuggestedRemedy  
Fix the editorial instruction.  
Proposed Response Response Status O

---

Cl 45 SC 45.2.1.22 P23 L9 # 110  
Ran, Adee Cisco  
Comment Type TR Comment Status X  
In D2.1 of 802.3dc (as in 802.3cn-2019) bits 14:11 are reserved, not just 14:12, so the new assignments should be bits 12:11, to avoid a single bit gap.  
SuggestedRemedy  
Assign bits 12:11.  
Proposed Response Response Status O

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 45 SC 45.2.1.24 P23 L47 # 111  
Ran, Adee Cisco  
Comment Type TR Comment Status X  
Bits 0 and 1 of register 1.26 have been assigned by 802.3ck (since D1.0, December 2019) and are not available.  
SuggestedRemedy  
Keep bits 1:0 reserved, and assign bits 11:10 instead (or others based on availability).  
Change 45.2.1.24.7 and 45.2.1.24.8 accordingly.  
Proposed Response Response Status O

Cl 78 SC 78.1.4 P25 L8 # 112  
Ran, Adee Cisco  
Comment Type E Comment Status X  
802.3cw is not expected to be published before 802.3db, so its modifications should not be included here.  
I do not see anything in the table that does not match 802.3dc, so this seems to be only an error in the editorial instruction.  
Also applies to two instances in 116.1.3 (P35 L40 and P38 L27).  
SuggestedRemedy  
Fix the editorial instructions.  
Proposed Response Response Status O

Cl 00 SC 0 P25 L20 # 113  
Ran, Adee Cisco  
Comment Type E Comment Status X  
Several cross-references to content that is not included in this draft are formatted in green, but unlike other amendments, they are active (and broken) links.  
Additionally, many cross-references to content in amended clauses that are included in this draft (e.g. clauses 82 and 91) are also formatted in green (and some are broken links).  
SuggestedRemedy  
Make all external cross-references plain text in green, and all internal cross-references active links in black.  
Proposed Response Response Status O

Cl 91 SC 91.5.3.3 P30 L18 # 114  
Ran, Adee Cisco  
Comment Type E Comment Status X  
The amended text of this paragraphs is unclear. The normative requirement of the paragraph is missing.  
The current content is insufficient for readers without going to the base document to see what the "shall" is about.  
SuggestedRemedy  
Include the third paragraph in its entirety.  
Proposed Response Response Status O

Cl 116 SC 116.1.3 P37 L10 # 115  
Ran, Adee Cisco  
Comment Type ER Comment Status X  
802.3cw is not expected to be published before 802.3db, so its modifications (400GBASE-ZR) should not be included here.  
SuggestedRemedy  
Fix the editorial instruction, and remove the columns and rows for 400GBASE-ZR.  
Proposed Response Response Status O

Cl 116 SC 116.4 P38 L38 # 116  
Ran, Adee Cisco  
Comment Type E Comment Status X  
Inserted content is not underlined.  
SuggestedRemedy  
Apply underline formatting for the two inserted rows.  
Proposed Response Response Status O

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 167 SC 167.1 P41 L46 # 117

Ran, Adeo Cisco

Comment Type ER Comment Status X

802.3ck is scheduled to be published after 802.3db, and this draft is an amendment of 802.3-202x with amendments not including 802.3ck. Therefore clauses 120F and 120G are not part of the amended standard and are undefined.

In addition, the nomenclature tables in clauses 80 and 116 do not include annexes 120F and 120G.

802.3ck should amend clause 167 to point to these annexes instead.

If 802.3ck is published first, several changes will be needed in 802.3db, not just these two tables.

SuggestedRemedy

Delete the rows for annexes 120F and 120G from Table 167-1 and Table 167-2, and delete the editor's notes referring to them.

Proposed Response Response Status O

Cl 00 SC 0 P41 L51 # 118

Ran, Adeo Cisco

Comment Type ER Comment Status X

Per 1.1.6 Word usage, "must" cannot be used when stating mandatory requirements.

Multiple instances of the word "must" appear in text inherited from earlier clauses, on pages 41, 43, 45 (twice), 48, 55, and 56. These earlier clauses have been edited in 802.3dc D2.1 to eliminate usage of this word.

SuggestedRemedy

Change the sentences that include "must" based on similar text in 802.3dc D2.1.

Proposed Response Response Status O

Cl 167 SC 167.1 P42 L46 # 119

Ran, Adeo Cisco

Comment Type E Comment Status X

The sentence "Further relevant information may be found in Clause 1 (terminology and conventions, references, definitions and abbreviations) and Annex A (bibliography, referenced as [B1], [B2], etc.)." Does not belong in this paragraph.

SuggestedRemedy

Move the quoted sentence to a separate paragraph at the end of the subclause.

Proposed Response Response Status O

Cl 167 SC 167.2 P44 L7 # 120

Ran, Adeo Cisco

Comment Type E Comment Status X

It seems that there is an unnecessary line break after "VR2,", maybe because the paragraph is not justified.

SuggestedRemedy

Apply paragraph formatting to justify the paragraph (and others if necessary). Delete the line break if it exists.

Proposed Response Response Status O

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 167 SC 167.5.2 P47 L36 # 121

Ran, Adee Cisco  
 Comment Type T Comment Status X

The transmit function converts symbol streams to optical signals, not signal streams to optical signal streams.

This text seems to originate in clause 138, which has similar incorrect language (and should be fixed in maintenance). The precedence in most other clauses (e.g. 121.5.2, 122.5.2, 123.5.2, 124.5.2, 151.5.2) should be followed instead.

Similarly for the receive function, in the other direction, in 167.5.3.

*SuggestedRemedy*

In 167.5.2, change from  
 "The PMD Transmit function shall convert the one, two, or four signal streams requested by the PMD service interface messages PMD:IS\_UNITDATA\_i.request into one, two, or four separate optical signal streams"  
 to  
 "The PMD Transmit function shall convert the one, two, or four symbol streams requested by the PMD service interface messages PMD:IS\_UNITDATA\_i.request into one, two, or four separate optical signals".

In 167.5.3, change from  
 "The PMD Receive function shall convert the one, two, or four parallel optical signal streams received from the MDI into separate symbol streams"  
 to  
 "The PMD Receive function shall convert the one, two, or four parallel optical signals received from the MDI into one, two, or four separate symbol streams".

Proposed Response Response Status O

Cl 167 SC 167.5.2 P47 L43 # 122

Ran, Adee Cisco  
 Comment Type T Comment Status X

"tx\_symbols zero, one, two, and three" - The sentence refers to values of tx\_symbol, the argument of PMD:IS\_UNITDATA\_i.request. "tx\_symbols" is undefined.

This text seems to originate in clause 138, which has similar incorrect language (and should be fixed in maintenance). The precedence in most other clauses (e.g. 121.5.2, 122.5.2, 123.5.2, 124.5.2) should be followed instead.

Similarly for the receive function, with rx\_symbols, in 167.5.3.

*SuggestedRemedy*

Change "tx\_symbols zero, one, two, and three" to "tx\_symbol values zero, one, two, and three".

Similarly for rx\_symbols in 167.5.3.

Proposed Response Response Status O

Cl 167 SC 167.5.5 P48 L42 # 123

Ran, Adee Cisco  
 Comment Type E Comment Status X

The sentence "Various implementations of the Signal Detect function are permitted by this standard" seems irrelevant here, and is probably repeated from the previous subclause.

*SuggestedRemedy*

Delete the quoted sentence.

Proposed Response Response Status O

Cl 167 SC 167.6 P50 L1 # 124

Ran, Adee Cisco  
 Comment Type T Comment Status X

There is no RS-FEC sublayer in 200GBASE-R and 400GBASE-R. The lane reordering is a PCS function in these PHYs.

*SuggestedRemedy*

Change "the RS-FEC sublayer is" to "the PCS and the RS-FEC sublayer are".

Proposed Response Response Status O

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

CI 167 SC 167.8 P54 L3 # 125

Ran, Adee Cisco  
 Comment Type T Comment Status X

The normative requirements from PMDs are stated in 167.7.1 and 167.7.2 with "shall" statements that encompass all the requirements, and refer to 167.8 for definitions.

There is no need to have additional "shall" statements for each of the definitions in 167.8 and its subclauses. These are not additional requirements but definitions of the requirements stated above.

Specifically, the "shall" in 167.8 is not a requirement but a definition of the test conditions. Also, the references to 121.8.9.1, 121.8.9.2, and 121.8.9.3 for SRS are incorrect.

The suggested remedy is to rephrase text in some of the subclauses of 167.8 as definitions, and to delete statements in other subclauses which are repetitions of the existing normative requirement.

(The commenter is aware that the text in question is based on similar text found in many clauses of the base document; However, each clause is independent and a project may and should divert from copied text if it improves the standard. Changing the base document to include these improvements is a separate activity).

*SuggestedRemedy*

In 167.8, change "shall be made" to "is made".

In 167.8.2, change "shall be within the range given in Table 167-7 if measured per IEC 61280-1-3" to "measurement method is defined in IEC 61280-1-3".

In 167.8.3, change "shall be within the limits given in Table 167-7 if measured using the methods given in IEC 61280-1-1" to "measurement method is defined in IEC 61280-1-1".

In 167.8.4, change "The OMAouter of each lane shall be within the limits given in Table 167-7 if measured as defined in 121.8.4." to "The OMAouter measurement method is defined in 121.8.4."

In 167.8.5, change "The TDECQ of each lane shall be within the limits given in Table 167-7 if measured using the methods specified in 121.8.5" to "The TDECQ measurement method is specified in 121.8.5".

In 167.8.6, delete "The TECQ of each lane shall be within the limits given in Table 167-7 if measured using a test pattern specified for TECQ in Table 167-11."

In 167.8.7, delete "The overshoot/undershoot of each lane shall be within the limits given in Table 167-7 if measured using a test pattern specified for overshoot/undershoot in Table 167-11."

In 167.8.8, delete "The transmitter power excursion of each lane shall be within the limits given in Table 167-7 if measured using a test pattern specified for transmitter power excursion in

Table 167-11."

In 167.8.9, change "The extinction ratio of each lane shall be within the limits given in Table 167-7 if measured using the methods specified in 121.8.6" to "The extinction ratio measurement method is as specified in 121.8.6".

In 167.8.10, delete "The transmitter transition time of each lane shall be within the limits given in Table 167-7 if measured using a test pattern specified for transmitter transition time in Table 167-11."

In 167.8.11, change "RIN shall be as defined by the measurement methodology of 52.9.6 " to "The RIN12OMA measurement method is as specified in 52.9.6".

In 167.8.12, delete "The receiver sensitivity (OMAouter) of each lane shall be within the limits given in Table 167-8 if measured using a test pattern specified for receiver sensitivity in Table 167-11."

In 167.8.13, change "Stressed receiver sensitivity shall be within the limits given in Table 167-8 if measured using the methodology defined in 121.8.9.1 and 121.8.9.3, with the conformance test signal at TP3 as described in 121.8.9.2" to "The stressed receiver sensitivity measurement method is as defined in 121.8.10".

Delete the PICS table in 167.11.4.4.

*Proposed Response* Response Status O

CI 167 SC 167.8.1.1 P55 L26 # 126

Ran, Adee Cisco  
 Comment Type E Comment Status X

This subclause deals with "Multi-lane testing considerations", mostly related to receiver testing. Its hierarchical placement under 167.8.1 "Test patterns for optical parameters" is incorrect.

*SuggestedRemedy*

Change the hierarchy to make this a level 2 subclause (167.8.2).

*Proposed Response* Response Status O

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

CI 167 SC 167.8.1.1 P55 L42 # 127  
 Ran, Adee Cisco  
 Comment Type T Comment Status X  
 The sentence "Alternative test methods that generate equivalent results may be used" does not apply only to "Multi-lane testing considerations". Within this clause, it does not make sense in the middle of a paragraph that deals with various considerations specific for multi-lane testing.  
 SuggestedRemedy  
 Either move this sentence to the parent subclause 167.8, or to a separate paragraph at the end of this subclause, or delete it.  
 Proposed Response Response Status O

CI 167 SC 167.10.2.2 P62 L29 # 130  
 Ran, Adee Cisco  
 Comment Type E Comment Status X  
 In "MHz.km" the period is in appropriate. Per IEEE Std 260.1 (referred to by the style manual), either a multiplicative dot or a non-breaking space should be used.  
 To align with the table footnote, use a multiplicative dot.  
 SuggestedRemedy  
 change to "MHz.km".  
 Proposed Response Response Status O

CI 167 SC 167.8.3 P56 L5 # 128  
 Ran, Adee Cisco  
 Comment Type E Comment Status X  
 "Figure 53-6" is a broken link (not found in this document), and is not formatted in green.  
 SuggestedRemedy  
 Change to regular text and format in forest green.  
 Proposed Response Response Status O

CI 167 SC 167.10.2.2 P62 L39 # 131  
 Ran, Adee Cisco  
 Comment Type E Comment Status X  
 The footnotes to Table 167-15 are about the size of the table itself. Footnote e seems to contain information pertinent separately to each of the fiber types, so may be more adequate as part of the table.  
 SuggestedRemedy  
 Consider moving the content of the footnotes into the table or to the body of the subclause.  
 Proposed Response Response Status O

CI 167 SC 167.9.1 P59 L53 # 129  
 Ran, Adee Cisco  
 Comment Type ER Comment Status X  
 The "General safety" subclauses in the base document now refer to Annex J.  
 SuggestedRemedy  
 Change the body of this subclause to "All equipment subject to this clause shall conform to the general safety requirements as specified in J.2".  
 Also change PICS item ES1.  
 Proposed Response Response Status O

CI 167 SC 167.10.2.2 P62 L44 # 132  
 Ran, Adee Cisco  
 Comment Type T Comment Status X  
 "IEC 60793-2-10" appears in the normative references list in 1.3 without a date. If amended, the updated reference pointer (with the expected publication year) should be placed in 1.3 as well as the editor's note about its expected publication.  
 If this document been liaised to 802.3, please include its pointer in the editor's note.  
 SuggestedRemedy  
 Per comment.  
 Proposed Response Response Status O

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 167 SC 167.10.3 P63 L17 # 133

Ran, Adee Cisco

Comment Type T Comment Status X

Receiver compliance testing is done at TP3 which is the MDI per 167.5.1. So the note should apply only to the transmitter.

SuggestedRemedy

Change the NOTE text to "Transmitter compliance testing is performed at TP2 as defined in 167.5.1, not at the MDI".

Proposed Response Response Status O

Cl 167 SC 167.10.3.1 P63 L18 # 134

Ran, Adee Cisco

Comment Type T Comment Status X

It is unclear why there are no optical lane assignments for the 100GBASE-VR1 and 100GBASE-VR1 MDIs.

SuggestedRemedy

Either add text and a diagram for the single-lane MDI lane assignments, or add a text or NOTE to explain why they are not specified.

Proposed Response Response Status O

Cl 167 SC 167.11.4.3 P69 L36 # 135

Ran, Adee Cisco

Comment Type E Comment Status X

The Value/Comment in S1 and S2 are invalid and unnecessary.

SuggestedRemedy

Delete the Value/Comment in both items.

Proposed Response Response Status O

Cl 167 SC 167.1 P41 L46 # 136

Brown, Matt Huawei

Comment Type ER Comment Status X

Annex 120F and Annex 120G are defined in 802.3ck. 802.3ck is an amendment that comes after 802.3db according to the published timelines and the amendment order proposed by the Working Group Chair. This further established in the front matter on page 1 and page 11 where is clearly shows that 802.3ck does not precede 802.3db. If these Annexes are relevant to the PHYs defined in this clause then this can be addressed by amendments to Clause 162 and other relevant clauses in 802.3ck.

If it is your intent to point out that AUIs with 100 Gb/s per lane signaling may exist then use an editor's note for that.

SuggestedRemedy

In Table 167-1 and Table 167-2 delete rows for Annex 120F and Annex 120G. Remove the related editor's notes.

Proposed Response Response Status O

Cl 167 SC 167.1 P41 L11 # 137

Brown, Matt Huawei

Comment Type E Comment Status X

Presumably 100 Gigabit Ethernet operates over one fiber, 200 over two, and 400 over four. Change wording to reflect that. Append the sentence with ", respectively".

SuggestedRemedy

"The PMD sublayers provide point-to-point 100, 200, and 400 Gigabit Ethernet links over one, two, or four pairs of multimode fiber, respectively." Apply similar change at page 42 line 49 and page 43 line 2.

Proposed Response Response Status O

Cl 80 SC 80.1.4 P27 L15 # 138

Brown, Matt Huawei

Comment Type E Comment Status X

Since the table is shown with insertion mark-up with surrounding unchanged text the correct instruction is "change" not "insert" and no further details are required.

SuggestedRemedy

Change the instruction to: "Change Table 80-1 as follows (some unchanged rows not shown)"

Proposed Response Response Status O

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 80 SC 80.4 P28 L47 # 139  
 Brown, Matt Huawei  
 Comment Type E Comment Status X  
 Since the table is shown with insertion mark-up with surrounding unchanged text the correct instruction is "change" not "insert" and no further details are required.  
 SuggestedRemedy  
 Change the instruction to: "Change Table 80-6 as follows (some unchanged rows not shown)"  
 Proposed Response Response Status O

Cl 91 SC 91.7.4.1 P33 L4 # 142  
 Brown, Matt Huawei  
 Comment Type E Comment Status X  
 Since the changes are clearly shown with insert mark-up the instruction is unnecessarily verbose.  
 SuggestedRemedy  
 Change the instruction to: "Change the table in 91.7.4.1 as follows (some unchanged rows not shown)". Same for the table in 91.7.4.2.  
 Proposed Response Response Status O

Cl 80 SC 80.4 P28 L14 # 140  
 Brown, Matt Huawei  
 Comment Type E Comment Status X  
 Bottom row has think border at top.  
 SuggestedRemedy  
 Change top border to "very thin".  
 Proposed Response Response Status O

Cl 116 SC 116.1.3 P35 L21 # 143  
 Brown, Matt Huawei  
 Comment Type E Comment Status X  
 Why not stick with the convention you've used in other tables and use change mark-up and surrounding unchanged text?  
 SuggestedRemedy  
 Change the instruction to: "Change Table 116-1 as follows (some unchanged rows not shown)". Underline text in new rows and add preceding and succeeding unchanged rows. Apply to other amended tables (including Table 161-7) with similar editing instructions.  
 Proposed Response Response Status O

Cl 91 SC 91.7.3 P32 L5 # 141  
 Brown, Matt Huawei  
 Comment Type E Comment Status X  
 Since the changes are clearly shown with insert mark-up the instruction is unnecessarily verbose.  
 SuggestedRemedy  
 Change the instruction to: "Change the table in 91.7.3 as follows (some unchanged rows not shown)"  
 Proposed Response Response Status O

Cl 116 SC 116.1.3 P35 L41 # 144  
 Brown, Matt Huawei  
 Comment Type E Comment Status X  
 Since the table is shown with insertion mark-up with surrounding unchanged text the correct instruction is "change" not "insert" and no further details are required.  
 SuggestedRemedy  
 Change the instruction to: "Change Table 116-2 as follows (some unchanged rows not shown)". Similar for Table 116.4.  
 Proposed Response Response Status O



EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 167 SC 167.1 P41 L51 # 145  
 Brown, Matt Huawei  
 Comment Type E Comment Status X  
 The word "must" in this context is deprecated.  
 SuggestedRemedy  
 Change footnote a in in Table 167-1 and Table 167-2 to: "The CGMII is an optional interface. However, if the CGMII is not implemented, a conforming implementation behaves functionally as though the RS and CGMII were present."  
 Proposed Response Response Status O

Cl 167 SC 167.8.1.1 P55 L33 # 146  
 Brown, Matt Huawei  
 Comment Type E Comment Status X  
 The word "must" in this context is deprecated.  
 SuggestedRemedy  
 Change text to the following or similar: "If each lane is stressed in turn, the BER is diluted by the three unstressed lanes, and the BER for that stressed lane alone is found"  
 Proposed Response Response Status O

Cl 167 SC 167.8.5 P56 L37 # 147  
 Brown, Matt Huawei  
 Comment Type E Comment Status X  
 The word "must" in this context is deprecated.  
 SuggestedRemedy  
 Change text to the following or similar: "If an equivalent-time sampling oscilloscope is used, the impact of the sampling process and the fiber emulation is also compensated for, so that the correct magnitude of noise is present at the output of the equalizer."  
 Proposed Response Response Status O

Cl 167 SC 167.3.2 P45 L26 # 148  
 Brown, Matt Huawei  
 Comment Type E Comment Status X  
 The word "must" in this context is deprecated. For similar clauses elsewhere this wording has been addressed by comments against 802.3dc D2.0 and will be reflected in 802.3dc D2.1.  
 SuggestedRemedy  
 Expunge "must" as done in similar clauses in 802.3dc D2.1. Also in 167.5.3  
 Proposed Response Response Status O

Cl 167 SC 167.1 P43 L32 # 149  
 Stassar, Peter Huawei  
 Comment Type ER Comment Status X  
 Missing em dash between "FIBER" and "50 m" & "100 m"  
 SuggestedRemedy  
 Add em dash plus 2 spaces between "FIBER" and "50 m", and between "FIBER" and "100 m"  
 Proposed Response Response Status O

Cl 167 SC 167.3.2.1 P45 L30 # 150  
 Stassar, Peter Huawei  
 Comment Type ER Comment Status X  
 Unnecessary adding of subclause 167.3.2.1  
 SuggestedRemedy  
 Move contents of 167.3.2.1 to 167.3.2 and remove heading of 167.3.2.1  
 Proposed Response Response Status O

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 167 SC 167.5.1 P46 L40 # 151  
 Stassar, Peter Huawei  
 Comment Type **ER** Comment Status **X**  
 The wording "The block diagrams for 200GBASE-VR2 and 200GBASE-SR2, and 100GBASE-VR1 and 100GBASE-SR1 are equivalent to Figure 167-2, but for two lanes and one lane per direction, respectively." is ambiguous  
 SuggestedRemedy  
 Change wording to "The block diagrams for 200GBASE-VR2 and 200GBASE-SR2 are equivalent to Figure 167-2, but for two lanes per direction. The block diagrams for 100GBASE-VR1 and 100GBASE-SR1 are equivalent to Figure 167-2, but for one lane per direction."  
 Proposed Response Response Status **O**

Cl 167 SC 167.7 P50 L9 # 152  
 Stassar, Peter Huawei  
 Comment Type **ER** Comment Status **X**  
 Missing comma after 200GBASE-SR2  
 SuggestedRemedy  
 Add comma after 200GBASE-SR2  
 Proposed Response Response Status **O**

Cl 167 SC 167.8.1.1 P55 L28 # 153  
 Stassar, Peter Huawei  
 Comment Type **ER** Comment Status **X**  
 Wrong cross reference.  
 SuggestedRemedy  
 Change cross reference "Figure 167.1.1" to section "167.1.1"  
 Proposed Response Response Status **O**

Cl 1 SC 1.4.103a P18 L28 # 154  
 Dudek, Mike Marvell  
 Comment Type **T** Comment Status **X**  
 200GBASE-SR2 should use 200GBASE-R encoding  
 SuggestedRemedy  
 Change 100GBASE\_R to 200GBase R.  
 Proposed Response Response Status **O**

Cl 1 SC 1.4.103a P18 L34 # 155  
 Dudek, Mike Marvell  
 Comment Type **T** Comment Status **X**  
 200GBASE-VR2 should use 200GBASE-R encoding  
 SuggestedRemedy  
 Change 100GBASE\_R to 200GBase R.  
 Proposed Response Response Status **O**

Cl 1 SC 1.4.103a P18 L40 # 156  
 Dudek, Mike Marvell  
 Comment Type **T** Comment Status **X**  
 400GBASE-SR2 should use 400GBASE-R encoding  
 SuggestedRemedy  
 Change 100GBASE\_R to 400GBase R.  
 Proposed Response Response Status **O**

Cl 1 SC 1.4.103a P18 L46 # 157  
 Dudek, Mike Marvell  
 Comment Type **T** Comment Status **X**  
 400GBASE-VR2 should use 400GBASE-R encoding  
 SuggestedRemedy  
 Change 100GBASE\_R to 400GBase R.  
 Proposed Response Response Status **O**

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 91 SC 91.6.3 P31 L4 # 158  
 Dudek, Mike Marvell  
 Comment Type E Comment Status X  
 This may be a problem with 802.3dc but "PMDs." should not be after DR  
 SuggestedRemedy  
 Delete PMDs on row 4  
 Proposed Response Response Status O

Cl 167 SC 167.1.1 P43 L43 # 162  
 Dudek, Mike Marvell  
 Comment Type T Comment Status X  
 Wrong cross-reference. 1.4.303 is the "end of packet de-limiter".  
 SuggestedRemedy  
 Change 1.4.303 to 1.4.344 . Also on line 52  
 Proposed Response Response Status O

Cl 116 SC 116.1.2 P35 L16 # 159  
 Dudek, Mike Marvell  
 Comment Type E Comment Status X  
 With only 2 items "all" isn't appropriate "both" is better  
 SuggestedRemedy  
 Change "all" to "both"  
 Proposed Response Response Status O

Cl 167 SC 167.5.1 P46 L47 # 163  
 Dudek, Mike Marvell  
 Comment Type E Comment Status X  
 missing words.  
 SuggestedRemedy  
 Change "defined in are made" to "defined in this clause are made" or add cross reference to 167.7.1  
 Proposed Response Response Status O

Cl 116 SC 116.4 P38 L18 # 160  
 Dudek, Mike Marvell  
 Comment Type E Comment Status X  
 The format of the Max bit times isn't consistent in the same table  
 SuggestedRemedy  
 Remove the space in "4 096" also on line 19. The same issue may exist in Table 116-7 but the other lines aren't shown  
 Proposed Response Response Status O

Cl 167 SC 167.5.1 P47 L1 # 164  
 Dudek, Mike Marvell  
 Comment Type E Comment Status X  
 missing words.  
 SuggestedRemedy  
 Change "defined in are made" to "defined in this clause are made" or add cross reference to 167.7.2  
 Proposed Response Response Status O

Cl 167 SC 167.1 P41 L29 # 161  
 Dudek, Mike Marvell  
 Comment Type E Comment Status X  
 In table 167-1 Clause 91 is out of order compared with table 140-1 in 802.3dc  
 SuggestedRemedy  
 Move clause 91 after clause 83  
 Proposed Response Response Status O

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 167 SC 167.8.5.1 P57 L15 # 165  
 Dudek, Mike Marvell  
 Comment Type T Comment Status X  
 The sentence isn't precisely stating that the reference equalizer has 9 taps (just that 9 taps are shown in Figure 167-4)  
 SuggestedRemedy  
 Change to "A function model of the 9 tap reference equalizer is shown...."  
 Proposed Response Response Status O

Cl 167 SC 167.8.7 P57 L53 # 168  
 Dudek, Mike Marvell  
 Comment Type T Comment Status X  
 Better wording could be used as 140.7.7 uses a different hit ratio. Make a similar change on page 58 line 12.  
 SuggestedRemedy  
 Change "using the methods in 140.7.7 with the hit ratio of 3E-3" to "using the methods in 140.7.7 except that a hit ratio of 3E-3 is used"  
 Proposed Response Response Status O

Cl 167 SC 167.8.6 P57 L42 # 166  
 Dudek, Mike Marvell  
 Comment Type TR Comment Status X  
 The fiber dispersion is now the first filter not the second  
 SuggestedRemedy  
 Change "except that the second filter representing the dispersion of the fiber is not used" to "except that the first filter representing the dispersion of the fiber is omitted"  
 Proposed Response Response Status O

Cl 167 SC 167.8.13 P59 L13 # 169  
 Dudek, Mike Marvell  
 Comment Type T Comment Status X  
 SECQ is not described in 167.8.6. It needs to be tied to TECQ that is described. Also two different aspects are combined in one bullet.  
 SuggestedRemedy  
 Make one bullet "The stressed receiver conformance test signal has a transition time that is no greater than the value specified in Table 167-7"  
 Make the second bullet "The SECQ of the stressed receiver conformance test signal is equal to the value of the TECQ of the signal measured according to 167.8.6 except that the optical splitter and variable reflector shown in Figure 121-4 are omitted."  
 Proposed Response Response Status O

Cl 167 SC 167.8.7 P57 L50 # 167  
 Dudek, Mike Marvell  
 Comment Type T Comment Status X  
 With TDECQ always having a narrower bandwidth filter than TECQ it is extremely unlikely to have larger overshoot/undershoot making the test with the waveform captured for TDECQ unnecessary. (Note this is different than single mode where the fiber dispersion can reduce or increase the overshoot.)  
 SuggestedRemedy  
 Change "Overshoot and undershoot are measured using the waveform captured for the TDECQ test (see 167.8.5) and the waveform captured for the TECQ test (see 167.8.6), but without the reference equalizer being applied in each case." to "Overshoot and undershoot are measured using the waveform captured for the TECQ test (see 167.8.6), but without the reference equalizer being applied"  
 Proposed Response Response Status O

Cl 167 SC 167.11.4.3 P69 L37 # 170  
 Dudek, Mike Marvell  
 Comment Type E Comment Status X  
 Missing references  
 SuggestedRemedy  
 Change to "Per definitions in 167.8" on lines 36 and 38  
 Proposed Response Response Status O

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 116 SC 116.2.5 P38 L0 # 171  
 Slavick, Jeff Broadcom  
 Comment Type **TR** Comment Status **X**  
 116.2.5 lists the clauses that provide the definition for 200G and 400Gs PMDs. Need to include 167 in that list.  
 SuggestedRemedy  
 Add Clause 167 into the last paragraph for 116.2.5 for rate.  
 Proposed Response Response Status **O**

Cl 80 SC 80.1.1 P28 L11 # 172  
 Slavick, Jeff Broadcom  
 Comment Type **TR** Comment Status **X**  
 100GAUI-1 is missing from Table 80-5, but is present in Table 167-1  
 SuggestedRemedy  
 Add 120F and 120G to Table 80-5 with the same editors note that is after Table 167-1.  
 Proposed Response Response Status **O**

Cl 116 SC 116.1.4 P36 L29 # 173  
 Slavick, Jeff Broadcom  
 Comment Type **TR** Comment Status **X**  
 200GAUI-2 is missing from Table 116-4, but is present in Table 167-2  
 SuggestedRemedy  
 Add 120F and 120G to Table 116-4 with the same editors note that is after Table 167-2.  
 Proposed Response Response Status **O**

Cl 116 SC 116.1.4 P36 L16 # 174  
 Slavick, Jeff Broadcom  
 Comment Type **TR** Comment Status **X**  
 400GAUI-4 is missing from Table 116-5, but is present in Table 167-2  
 SuggestedRemedy  
 Add 120F and 120G to Table 116-5 with the same editors note that is after Table 167-2.  
 Proposed Response Response Status **O**

Cl 167 SC 167.7 P50 L28 # 175  
 Nicholl, Shawn Xilinx  
 Comment Type **E** Comment Status **X**  
 Table 167-6 contains references to 100G PMDs and a footnote that reads "The PCS FEC correction function ..."  
 For 100G operation, the FEC (Clause 91) is not part of the PCS (Clause 82).  
 SuggestedRemedy  
 Propose to change the footnote text from "The PCS FEC correction function" to "The RS-FEC error correction function".  
 Proposed Response Response Status **O**

Cl 167 SC 167.8.1.1 P55 L30 # 176  
 Nicholl, Shawn Xilinx  
 Comment Type **E** Comment Status **X**  
 Table 167-10 Pattern 5 contains a "Pattern description" column that reads "Scrambled idle encoded by RS-FEC".  
 Later, 167.8.1.1 sub-clause text contains a reference with the words shuffled around.  
 SuggestedRemedy  
 Propose to change the sub-clause text from "Pattern 5 (RS-FEC encoded scrambled idle)" to "Pattern 5 (Scrambled idle encoded by RS-FEC)" such that the paragraph text matches the previous earlier table.  
 Proposed Response Response Status **O**

Cl 167 SC 167.9.1 P59 L54 # 177  
 Lewis, Jon Dell Technologies  
 Comment Type **TR** Comment Status **X**  
 IEC 60950-1 has been removed and the updated references are in Annex J  
 SuggestedRemedy  
 Change line 54 to read "All equipment that meets the requirements of this standard shall conform to J.2."  
 Proposed Response Response Status **O**

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 167 SC 167.11.4.5 P70 L34 # 178  
 Lewis, Jon Dell Technologies  
 Comment Type **TR** Comment Status **X**  
 IEC 60950-1 has been removed and the updated references are in Annex J  
 SuggestedRemedy  
 Change to "Conforms to J.2"  
 Proposed Response Response Status **O**

Cl 167 SC 167.8.5 P56 L11 # 181  
 Murty, Ramana Broadcom Inc.  
 Comment Type **T** Comment Status **X**  
 The TDECQ test for a multi-mode link uses a fiber emulation filter in place of a real fiber.  
 SuggestedRemedy  
 Add a figure to show the TDECQ conformance test block diagram, similar to Figure 121-4.  
 Proposed Response Response Status **O**

Cl 167 SC 167.7.1 P51 L30 # 179  
 Murty, Ramana Broadcom Inc.  
 Comment Type **T** Comment Status **X**  
 The overshoot/undershoot (max) value of 26% at 3E-3 hit ratio in Table 167-7 is low. One should use the same value as single mode links (802.3cu) since the receiver configuration is similar, PIN-TIA-FFE.  
 SuggestedRemedy  
 Specify overshoot/undershoot (max) as 29% at 3E-3 hit ratio (equivalent to 22% at 1E-2 hit ratio, value in 802.3cu).  
 Proposed Response Response Status **O**

Cl 1 SC 1.4 P18 L28 # 182  
 Huber, Tom Nokia  
 Comment Type **T** Comment Status **X**  
 200GBASE-SR2 should be described as using 200GBASE-R encoding  
 SuggestedRemedy  
 Change "... using 100GBASE-R encoding ..." to "... using 200GBASE-R encoding ..."  
 Proposed Response Response Status **O**

Cl 167 SC 167.7.1 P51 L32 # 180  
 Murty, Ramana Broadcom Inc.  
 Comment Type **T** Comment Status **X**  
 Transmitter power excursion (max) of 2 dBm in Table 167-7 was proposed for a hit ratio of 1E-2.  
 SuggestedRemedy  
 Specify transmitter power excursion (max) as 2.3 dBm at 3E-3 hit ratio.  
 Proposed Response Response Status **O**

Cl 1 SC 1.4 P18 L34 # 183  
 Huber, Tom Nokia  
 Comment Type **T** Comment Status **X**  
 200GBASE-VR2 should be described as using 200GBASE-R encoding  
 SuggestedRemedy  
 Change "... using 100GBASE-R encoding ..." to "... using 200GBASE-R encoding ..."  
 Proposed Response Response Status **O**

Cl 1 SC 1.4 P18 L40 # 184  
 Huber, Tom Nokia  
 Comment Type **T** Comment Status **X**  
 400GBASE-VR4 should be described as using 400GBASE-R encoding  
 SuggestedRemedy  
 Change "... using 100GBASE-R encoding ..." to "... using 400GBASE-R encoding ..."  
 Proposed Response Response Status **O**

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

CI 80 SC 80.1.1 P28 L1 # 185  
 Huber, Tom Nokia  
 Comment Type E Comment Status X  
 The heading number for the subclause titled "Physical Layer signaling systems" is 80.1.5  
 SuggestedRemedy  
 Change 80.1.1 to 80.1.5  
 Proposed Response Response Status O

CI 80 SC 80.1.1 P28 L8 # 186  
 Huber, Tom Nokia  
 Comment Type E Comment Status X  
 The heading for the new columns in Table 80--5 is "Clause 167", while all other columns in the table only have the clause number as a heading.  
 SuggestedRemedy  
 Change the heading from "Clause 167" to "167"  
 Proposed Response Response Status O

CI 116 SC 116.1.4 P36 L32 # 187  
 Huber, Tom Nokia  
 Comment Type E Comment Status X  
 The heading for the new columns in Table 116-4 is "Clause 167", while all other columns in the table only have the clause number as a heading.  
 SuggestedRemedy  
 Change the heading from "Clause 167" to "167"  
 Proposed Response Response Status O

CI 116 SC 116.1.4 P37 L14 # 188  
 Huber, Tom Nokia  
 Comment Type T Comment Status X  
 Table 116-5 includes columns for 400GBASE-ZR, assuming that P802.3cw would be published prior to P802.3db. Since P802.3cw is not yet in working group ballot, it not clear tha it would be published first.  
 SuggestedRemedy  
 Remove the columns for 400GBASE-ZR from the table, and modify the editing instruction to delete "(as modified by IEEE Std 802.3cw-202x)"  
 Proposed Response Response Status O

CI 116 SC 116.4 P38 L28 # 189  
 Huber, Tom Nokia  
 Comment Type E Comment Status X  
 The changes to be made to table 116-7 don't include anything that would be impacted by 802.3cw, so there is no need for the editing instruction to reference 802.3cw. Given that 802.3cw is not yet in working group ballot, it is also unclear that it would be published before 802.3db.  
 SuggestedRemedy  
 Remove "(as modified by IEEE Std 802.3cw-202x)" from the editing instruction  
 Proposed Response Response Status O

CI 116 SC 116.5 P38 L54 # 190  
 Huber, Tom Nokia  
 Comment Type E Comment Status X  
 The changes to be made to tables 116-8 and 116-9 don't include anything that would be impacted by 802.3cw, so there is no need for the editing instruction to reference 802.3cw. Given that 802.3cw is not yet in working group ballot, it is also unclear that it would be published before 802.3db.  
 SuggestedRemedy  
 Remove "(as modified by IEEE Std 802.3cw-202x)" from the editing instruction  
 Proposed Response Response Status O

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

CI 167 SC 167.11.3 P67 L1 # 191  
 Huber, Tom Nokia  
 Comment Type T Comment Status X  
 In the Major Capabilities PICS table, the Item codes \*VR1, \*VR2, and \*VR4 are not referenced in any of the subsequent tables. As such, they should not have the \* in the name.  
 SuggestedRemedy  
 Rename these items VR1, VR2, VR4.  
 Proposed Response Response Status O

CI 167 SC 167.8.5 P56 L35 # 194  
 Dawe, Piers Nvidia  
 Comment Type E Comment Status X  
 "The normalized power density spectrum, N(f)" is missing a word (noise).  
 SuggestedRemedy  
 Change to ""The normalized noise power density spectrum, N(f)" as in 121.8.5.3, TDECQ measurement method  
 Proposed Response Response Status O

CI 167 SC 167.11.3 P67 L1 # 192  
 Huber, Tom Nokia  
 Comment Type T Comment Status X  
 In the Major Capabilities table, the item codes \*VR2, \*SR2, \*VR4, and \*SR4 are used twice, once for the PMD and once for the MDI. The SR2 and SR4 item codes are used in 6 of the rows in 167.11.4.6; it is unclear if these are referring to the PMD Major Capability, the MDI Major Capability, or both.  
 SuggestedRemedy  
 Use different names for the 4 MDI rows (e.g. xxx-MDI) in the Major Capabilities table, and update 167.11.4.6 to reflect the intended conditions.  
 Proposed Response Response Status O

CI 167 SC 167.7.1 P51 L28 # 195  
 Dawe, Piers Nvidia  
 Comment Type TR Comment Status X  
 As the channel or signal is relatively slower than for any other optical PMDs so far, we should expect higher Ceq, contributing to TDECQ, but we should not expect higher K because we have 9 taps rather than 5, and 2% threshold adjust rather than 1%. We expect that TDECQ, Ceq and K measurements with 2% threshold adjust will be more accurate than for previous specs, so we need less padding for measurement issues. We should re-optimize the spec considering these things, encouraging good equalisable signals both after and before the fibre. The K' limit can catch some bad transmitters that an overshoot limit intended to pass a good signal would miss - and K' is a free by-product of TECQ.  
 The K' limit is similar to VEC in C2M and EVM in coherent: a screen for signals that are bad after equalisation.  
 SuggestedRemedy

Insert row for K'=TECQ-10.log10(Ceq'), limit 4 dB (where K' and Ceq' are the two parts of TECQ as K and Ceq are the two parts of TDECQ). For both VR and SR.  
 Proposed Response Response Status O

CI 116 SC 116.4 P38 L4 # 193  
 Dawe, Piers Nvidia  
 Comment Type E Comment Status X  
 unchanged rows not shown  
 SuggestedRemedy  
 some unchanged rows not shown  
 Proposed Response Response Status O

CI 167 SC 167.7.3 P53 L32 # 196  
 Dawe, Piers Nvidia  
 Comment Type E Comment Status X  
 Figure is a bitmap and looks bad  
 SuggestedRemedy  
 Insert figure another way so it is a vector graphic. It may be better to avoid diagonal text.  
 Proposed Response Response Status O



IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 167 SC 167.10.2.1 P62 L44 # 197

Dawe, Piers Nvidia

Comment Type E Comment Status X

Problems with footnote f: "these applications" isn't defined, "application" is too vague a word for a standard. What can the reader do with "should have"? I think we mean that older OM3 and OM4 comply to the new spec. When it says "OM3 and OM4 fibers compliant to previous versions ... are suitable for these applications", does that mean that fibers compliant to the current version aren't? Are the old fibres unsuitable at less than maximum length?

SuggestedRemedy

Change  
Amendment 1 to IEC 60793-2-10 reflects the fact that the chromatic dispersion values of OM3, OM4 and OM5 should have the same specification. OM3 and OM4 fibers compliant to previous versions of IEC 60793-2-10 are suitable for these applications at the maximum length specified.  
to  
These limits are consistent with IEC 60793-2-10 Amendment 1 (202x). For OM5, they are the same as previous versions of IEC 60793-2-10. OM3 and OM4 fibers compliant to previous versions of IEC 60793-2-10 are considered compliant for 100GBASE-VR1, 200GBASE-VR2, 400GBASE-VR4, 100GBASE-SR1, 200GBASE-SR2, and 400GBASE-SR4 Physical Layer types.

Proposed Response Response Status O

Cl 167 SC 167.10.3.2 P64 L23 # 198

Dawe, Piers Nvidia

Comment Type T Comment Status X

I think this section says that 100GBASE-VR1 or 100GBASE-SR1 must use a non-angled PC interface while 167.10.3.3 must be angled. For "breakout" use, this is enough of a contradiction that it could cause problems

SuggestedRemedy

Add text saying that a device/port/module with multiple 1-lane PMDs can use the adapter, receptacle or plug according to 167.10.3.3 and one of the active lane positions given in 167.10.3.1.

Proposed Response Response Status O

Cl 45 SC 45.2.1.24 P23 L12 # 199

Dawe, Piers Nvidia

Comment Type E Comment Status X

In the tables in Clause 45, the bits are presented in reverse order.  
In 802.3dc, Table 45-27, 40G/100G PMA/PMD extended ability 2 register bit definitions, bits 3 to 9 are allocated, bits 0 and

SuggestedRemedy

Move the row beginning "1:26:2:X0X Reserved" to above 1.26.1 100GBASE-SR1 ability.  
Delete the last row "...".  
So that the reader can understand the context of the amendment and check issues like this, include the adjacent unchanged row from the base document, beginning "1.26.3 100GBASE-DR ability" and change "unchanged rows not shown" to "some unchanged rows not shown".

Proposed Response Response Status O

Cl 45 SC 45.2.1.22 P23 L19 # 200

Dawe, Piers Nvidia

Comment Type E Comment Status X

14:14

SuggestedRemedy

Delete :14

Proposed Response Response Status O

Cl 80 SC 80.1.1 P28 L10 # 201

Dawe, Piers Nvidia

Comment Type E Comment Status X

Clause 167

SuggestedRemedy

167

Proposed Response Response Status O

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 80 SC 80.4 P29 L1 # 202  
 Dawe, Piers Nvidia  
 Comment Type E Comment Status X  
 Table 80-6--Sublayer delay constraints  
 SuggestedRemedy  
 Table 80-7--Sublayer delay constraints  
 Proposed Response Response Status O

Cl 116 SC 116.1.3 P35 L33 # 203  
 Dawe, Piers Nvidia  
 Comment Type E Comment Status X  
 Use the standard order of MAC rate (slow to fast), reach (short to long), lane count (high to low), as in Table 80-1 and Table 116-2. So, 200GBASE-VR2 comes after 200GBASE-CR4 and before 200GBASE-SR4, and 200GBASE-SR2 comes after 200GBASE-SR4 and before 200GBASE-DR4. Also show the context to make it easier to review the document.  
 SuggestedRemedy  
 Show the 200GBASE-CR4 row from the base document, then the 200GBASE-VR2 row as in the draft, then the 200GBASE-SR4 row from the base document, then the 200GBASE-SR2 row as in the draft, then the 200GBASE-DR4 row from the base document. Revise the instructions to editor accordingly.  
 Proposed Response Response Status O

Cl 167 SC 167.8.11 P58 L42 # 204  
 Zivny, Pavel Tektronix  
 Comment Type T Comment Status X  
 The measurement bandwidth mandated for RIN measurement by the text "b) The upper -3 dB limit of the measurement apparatus is to be approximately equal to the signaling rate (i.e., 53.125 GHz)." is an copy/oaste from past standards. It is neither justified nor feasible. Standard measurement bandwidth should be used.  
 SuggestedRemedy  
 Replace the text "b) The upper -3 dB limit of the measurement apparatus is to be approximately equal to the signaling rate (i.e., 53.125 GHz)." with "b) The bandwidth of the measurement apparatus shall be the same as in "167.8.10 Transmitter transition time".  
 Proposed Response Response Status O

Cl 167 SC 167.8.6 P57 L40 # 205  
 Zivny, Pavel Tektronix  
 Comment Type T Comment Status X  
 The configuration of TDECQ measurement and of TECQ measurement is insufficiently clear. A figure should be added for better clarity. The figure (on page 2 of the ppt) is as was (email from Zivny to Dudek et al. Tue 9/21/2021 2:06 PM PDT) in ppt tAlso attached to the comment email.  
 SuggestedRemedy  
 in the clause "167.8.6 Transmitter eye closure for PAM4 (TECQ)" do replace the following text "The transmitter eye closure for PAM4 (TECQ) is a measure of the optical transmitter's eye closure at TP2." with "The transmitter eye closure for PAM4 (TECQ) is a measure of the optical transmitter's eye closure at TP2; see figure XYZ". Also, in "167.8.5 Transmitter and dispersion eye closure for PAM4 (TDECQ)", append line 16 "Table 167-11 specifies the test pattern to be used for measurement of TDECQ." with line "See Figure XYZ for measurement setup."  
 Proposed Response Response Status O

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 1 SC 1.4 P18 L27 # 206  
 Marris, Arthur Cadence Design Systems  
 Comment Type **E** Comment Status **X**  
 Missing space in "1.4.103a200GBASE-SR2:"  
 SuggestedRemedy  
 Add space and in the next three sub headings  
 Proposed Response Response Status **O**

Cl 45 SC 45.2.1.21 P22 L37 # 209  
 Marris, Arthur Cadence Design Systems  
 Comment Type **ER** Comment Status **X**  
 1.23.7 and 1.23.8 are being used by 802.3ck  
 SuggestedRemedy  
 Move the bits to 1.23.9 and 1.23.10 and add reserved row for 1.23.8:7  
 Proposed Response Response Status **O**

Cl 45 SC 45.2.1.6 P21 L10 # 207  
 Marris, Arthur Cadence Design Systems  
 Comment Type **E** Comment Status **X**  
 Show "1 1 1 x x x x = reserved" as struck through  
 Change "1 1 1 1 0 0 0 = 50GBASE-BR40-U" to "1 1 1 1 0 0 0 = reserved"  
 add "1 1 1 0 X X X = reserved"  
 SuggestedRemedy  
 See comment  
 Proposed Response Response Status **O**

Cl 45 SC 45.2.1.22 P23 L19 # 210  
 Marris, Arthur Cadence Design Systems  
 Comment Type **E** Comment Status **X**  
 Clean up reserved rows in Table 45-25  
 SuggestedRemedy  
 On line 19 make it a single reserved bit 1.24.14 and show ":11" crossed out  
 Add another underlined reserved row for 1.24.11. (This bit will be used by 802.3cw for 400GBASE-ZR.)  
 Proposed Response Response Status **O**

Cl 45 SC 45.2.1.7.4 P21 L43 # 208  
 Marris, Arthur Cadence Design Systems  
 Comment Type **E** Comment Status **X**  
 Make 167.5.10 a cross reference  
 SuggestedRemedy  
 Make 167.5.10 a cross reference and similarly make the next two tables include cross references  
 Proposed Response Response Status **O**

Cl 45 SC 45.2.1.24 P24 L7 # 211  
 Marris, Arthur Cadence Design Systems  
 Comment Type **ER** Comment Status **X**  
 1.26.0 and 1.26.1 are being used by 802.3ck  
 SuggestedRemedy  
 Move these ability bits somewhere else  
 Proposed Response Response Status **O**

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 78 SC 78.1.4 P25 L6 # 212  
 Marris, Arthur Cadence Design Systems  
 Comment Type T Comment Status X  
 I do not see EEE listed in the P802.3db objectives  
 SuggestedRemedy  
 Consider deleting Clause 78 from the 802.3db draft.  
 Proposed Response Response Status O

Cl 167 SC 167.7.1 P51 L12 # 215  
 Marris, Arthur Cadence Design Systems  
 Comment Type T Comment Status X  
 I thought for new projects the tolerance on the transmit signalling rate is being tightened to 50 ppm  
 SuggestedRemedy  
 Consider changing 100ppm to 50ppm  
 Proposed Response Response Status O

Cl 80 SC 80.1.1 P28 L11 # 213  
 Marris, Arthur Cadence Design Systems  
 Comment Type ER Comment Status X  
 Change "Clause 167" to "167"  
 SuggestedRemedy  
 Change "Clause 167" to "167"  
 Proposed Response Response Status O

Cl FM SC FM P1 L10 # 216  
 Grow, Bob RMG Consulting  
 Comment Type E Comment Status X  
 The introduction identifies the amendment as #4.  
 SuggestedRemedy  
 Amendment 4:  
 Proposed Response Response Status O

Cl 167 SC 167.1 P41 L17 # 214  
 Marris, Arthur Cadence Design Systems  
 Comment Type E Comment Status X  
 Choose font colour of "Clause 45" from forest green to black  
 SuggestedRemedy  
 Choose font colour of "Clause 45" from forest green to black. Similarly for Clause 1, 80, 91 and 116 on the next page.  
 Proposed Response Response Status O

Cl FM SC FM P1 L27 # 217  
 Grow, Bob RMG Consulting  
 Comment Type E Comment Status X  
 Now that P802 D2.1 is out, this can be updated to add IEEE Std 802.3ct-2021 and IEEE Std 802.3cp-2021.  
 SuggestedRemedy  
 Per comment.  
 Proposed Response Response Status O

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl **FM** SC **FM** P1 L23 # 218  
 Grow, Bob RMG Consulting  
 Comment Type **E** Comment Status **X**  
 The latest revision draft when you resolve comments and recirculate P802.3db will likely be P802.3/D3.0  
 SuggestedRemedy  
 Per comment.  
 Proposed Response Response Status **O**

Cl **FM** SC **FM** P11 L10 # 219  
 Grow, Bob RMG Consulting  
 Comment Type **TR** Comment Status **X**  
 PHY is not an acronym for Physical Layer in IEEE Std 802.3. No acronym is defined for Physical Layer.  
 SuggestedRemedy  
 Delete "(PHY)"  
 Proposed Response Response Status **O**

Cl **FM** SC **FM** P3 L6 # 220  
 Grow, Bob RMG Consulting  
 Comment Type **E** Comment Status **X**  
 Forward Error Correction should not be capitalized, see Keywords and 1.5 of P802.3.  
 SuggestedRemedy  
 forward error correction  
 Proposed Response Response Status **O**

Cl **1** SC **1.4** P18 L12 # 221  
 Grow, Bob RMG Consulting  
 Comment Type **ER** Comment Status **X**  
 With the merge of IEEE Std 802.3ct and IEEE Std 802.3cp into P802.3/D2.1, indeed subclause numbering has changed in P802.3/D2.1, but additionally, base text has also changed from that in this draft. With the expected (conditional) approval to advance the revision project to SA ballot, stability of both subclause numbers and base text should be significantly improved with P802.3/D2.1 and future drafts.  
 SuggestedRemedy

Review changed clauses against the then current draft of the P802.3 revision project. (I have also submitted individual comments for some specific noted differences found in review of P802.3/D2.1 changes.)  
 Proposed Response Response Status **O**

Cl **1** SC **1.4.39a** P18 L26 # 222  
 Grow, Bob RMG Consulting  
 Comment Type **E** Comment Status **X**  
 Subclause numbers have changed with the merge of 802.3ct and 802.3cp.  
 SuggestedRemedy

Editing instructions and text subclause numbers can be updated. In P802.3/D2.1: 100GBASE-SR10 is 1.4.40, 100GBASE-SR4 is 1.4.41, 200GBASE-R is 1.4.108, 200GBASE-SR4 is now 1.4.109, 400GBASE-SR16 is now 142, 400GBASE-SR8 is now 144. Change inserted clauses to correspond.  
 Proposed Response Response Status **O**

Cl **45** SC **45** P21 L1 # 223  
 Grow, Bob RMG Consulting  
 Comment Type **E** Comment Status **X**  
 P802.3/D2.1, Clause 45 is still a mess for capitalization, from the Clause title using too many capitals to the erratic capitalization of "Register" in text throughout.  
 SuggestedRemedy

This draft seems to be internally consistent (only capitalize "Register" when followed by a name or the first word of a title/sentence), so no change is requested, this comment is just to note that future P802.3 drafts might try to fix some of this, changing base text used in this draft, and P802.3db should follow how this is resolved for P802.3/D2.1 comment resolutions.  
 Proposed Response Response Status **O**

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 45 SC 45.2.1.6 P21 L10 # 224

Grow, Bob RMG Consulting

Comment Type E Comment Status X

No changes are shown in the table, only inserts.

SuggestedRemedy

The last line of the table shows an unchanged row in contradiction to the instruction, (perhaps change instruction to say most unchanged rows not shown). Reserved row existing text should be taken from P802.3/D2.1 rather than what is shown (deleted rows in P802.3/D2.1 should be shown in strikethrough.)

Proposed Response Response Status O

Cl 45 SC 45.2.1.21.9 P22 L47 # 225

Grow, Bob RMG Consulting

Comment Type E Comment Status X

The insert point and subclause number are incorrect. Bit subclauses are written most significant bit to least significant bit (order of the two new subclauses is correct, but insert point is wrong).

SuggestedRemedy

Inserted clauses should be inserted after 45.2.1.21.1, with bit 1.3.8 being inserted as 45.2.1.21.1a, and bit 1.3.7 being inserted as 45.2.1.21.1b.

Proposed Response Response Status O

Cl 45 SC 45.2.1.22 P23 L9 # 226

Grow, Bob RMG Consulting

Comment Type E Comment Status X

With this draft now written to amend 802.3-202x, the parenthetical pointing at 802.3cn can be deleted.

SuggestedRemedy

Per comment.

Proposed Response Response Status O

Cl 45 SC 45.2.1.22 P23 L19 # 227

Grow, Bob RMG Consulting

Comment Type ER Comment Status X

The bit values do not agree between table and instruction. Unless other reserved bits are being defined in amendments 1-3, the bits defined should probably be 11 and 12, with Reserved becoming 14:13.

SuggestedRemedy

Per comment.

Proposed Response Response Status O

Cl 45 SC 45.2.1.22.11 P23 L31 # 228

Grow, Bob RMG Consulting

Comment Type E Comment Status X

Insert point and subclauses are incorrect.

SuggestedRemedy

insert point would be after 45.2.1.22.1 and bit numbers in the following subclauses should be consistent with resolution of comment on the bit numbers in the table bits 12 and 11 if that comment is accepted).

Proposed Response Response Status O

Cl 45 SC 45.2.1.24 P24 L12 # 229

Grow, Bob RMG Consulting

Comment Type E Comment Status X

Bit order in table is wrong. Did you really intend to leave 1.26.2 as the reserved bit instead of bit 0 being left reserved?

SuggestedRemedy

Bit 2 should appear above bit 1. Adjust bit numbers if you want the reserved bit to be the LSE of the register.

Proposed Response Response Status O

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 45 SC 45.2.1.24 P23 L49 # 230  
 Grow, Bob RMG Consulting  
 Comment Type ER Comment Status X  
 The editing instructon is wrong. The words "Table" should not be in the parenthetical. Also a three subclause numbers are wrong.  
 SuggestedRemedy  
 There is already a 45.2.1.24.7 in P802.3/D2.1 so the final subclause numbers should be 8 and 9 here and on the inserted subclauses on page 24.  
 Proposed Response Response Status O

Cl 80 SC 80.2.3 P28 L36 # 231  
 Grow, Bob RMG Consulting  
 Comment Type E Comment Status X  
 Forward Error Correction should not be capitalized, see Keywords and 1.5 of P802.3. Updating changed clause base text to P802.3/D2.1 or later should fix this. (The noted changes are in titles, which might be missed in a base text update.)  
 SuggestedRemedy  
 Forward error correction (FEC) sublayers, in line 38 forward error correction. Base text also changed for Clause 91, page 30, line 1 (forward error correction), page 23, line 2 (forward error correction) and p. 33., l.1 (forward error correction) and should be fixed  
 Proposed Response Response Status O

Cl 167 SC 167.1 P41 L51 # 232  
 Grow, Bob RMG Consulting  
 Comment Type E Comment Status X  
 The word "must" is deprecated.  
 SuggestedRemedy  
 "must behave" -> behaves  
 Proposed Response Response Status O

Cl 167 SC 167.1 P42 L30 # 233  
 Grow, Bob RMG Consulting  
 Comment Type E Comment Status X  
 The word "must" is deprecated.  
 SuggestedRemedy  
 "must behave" -> behaves  
 Proposed Response Response Status O

Cl 167 SC 167.3.2 P45 L26 # 234  
 Grow, Bob RMG Consulting  
 Comment Type E Comment Status X  
 The word "must" is deprecated.  
 SuggestedRemedy  
 "must be" -> "needs to be"  
 Proposed Response Response Status O

Cl 167 SC 167.3.2 P45 L27 # 235  
 Grow, Bob RMG Consulting  
 Comment Type E Comment Status X  
 The word "must" is deprecated.  
 SuggestedRemedy  
 "must also be" -> "also needs to be"  
 Proposed Response Response Status O

Cl 167 SC 167.5.4 P48 L30 # 236  
 Grow, Bob RMG Consulting  
 Comment Type E Comment Status X  
 The word "unavoidable" has been purged from P802.3/D2.1.  
 SuggestedRemedy  
 "As a conquence ..."  
 Proposed Response Response Status O

IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 167 SC 167.5.4 P48 L31 # 237  
 Grow, Bob RMG Consulting  
 Comment Type E Comment Status X  
 The word "must" is deprecated.  
 SuggestedRemedy  
 "must" -> "need to"  
 Proposed Response Response Status O

Cl 167 SC 167.8.1.1 P55 L33 # 238  
 Grow, Bob RMG Consulting  
 Comment Type E Comment Status X  
 The word "must" is deprecated.  
 SuggestedRemedy  
 "must be" -> "needs to be"  
 Proposed Response Response Status O

Cl 45 SC 45.2.1.21 P22 L37 # 239  
 Anslow, Pete Independent  
 Comment Type TR Comment Status X  
 Bits 1.23.7 and 1.23.8 are already allocated in P802.3ck D2.2 as:  
 1.23.8 200GBASE-CR2 ability  
 1.23.7 200GBASE-KR2 ability  
 SuggestedRemedy  
 Revert the allocations in register 1.23 to what they were in D1.2:  
 1.23.10 200GBASE-SR2 ability  
 1.23.9 200GBASE-VR2 ability  
 Proposed Response Response Status O

Cl 45 SC 45.2.1.24 P23 L45 # 240  
 Anslow, Pete Independent  
 Comment Type TR Comment Status X  
 Bits 1.26.0 and 1.26.1 are already allocated in P802.3ck D2.2 as:  
 1.26.1 100GBASE-CR1 ability  
 1.26.0 100GBASE-KR1 ability

SuggestedRemedy  
 Revert the allocations in register 1.26 to what they were in D1.2:  
 1.26.10 100GBASE-VR1 ability  
 1.26.2 100GBASE-SR1 ability  
 Note that in D1.2, these were shown in the wrong order in the table (the row for 1.26.10 100GBASE-VR1 should be above the row for 1.26.2 100GBASE-SR1)  
 Proposed Response Response Status O

Cl 78 SC 78.1.4 P25 L20 # 241  
 Anslow, Pete Independent  
 Comment Type E Comment Status X  
 Comment #65 against P802.3cj D2.0 defined the order of items in Table 78-1. See:  
<http://www.ieee802.org/3/cj/comments/P8023-D2p0-Comments-Final-byID.pdf#page=14>  
 According to this, 100GBASE-VR1 should be inserted after 100GBASE-CR10

SuggestedRemedy  
 Insert the row for 100GBASE-VR1 after the row for 100GBASE-CR10.  
 Proposed Response Response Status O

Cl 167 SC 167.1 P41 L52 # 242  
 Anslow, Pete Independent  
 Comment Type E Comment Status X  
 All occurrences of "must" have been removed from the 802.3 revision by comments 17 and 18 against D2.0. See:  
[https://www.ieee802.org/3/dc/comments/P8023\\_D2p0\\_comments\\_final\\_by\\_id.pdf#page=5](https://www.ieee802.org/3/dc/comments/P8023_D2p0_comments_final_by_id.pdf#page=5)  
 Remove this "must" in accordance with these changes.  
 Same issue in Table 167-2 footnote a.

SuggestedRemedy  
 In footnote a to Table 167-1 and footnote a to Table 167-2, change "must behave" to "behaves".  
 Proposed Response Response Status O



IEEE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

CI 167 SC 167.3.2 P45 L26 # 243  
 Anslow, Pete Independent  
 Comment Type E Comment Status X  
 All occurrences of "must" have been removed from the 802.3 revision by comments 17 and 18 against D2.0. See:  
[https://www.ieee802.org/3/dc/comments/P8023\\_D2p0\\_comments\\_final\\_by\\_id.pdf#page=5](https://www.ieee802.org/3/dc/comments/P8023_D2p0_comments_final_by_id.pdf#page=5)  
 Remove the two instances of "must" in accordance with these changes.  
 SuggestedRemedy  
 Change "... FEC lanes must be kept within limits ..." to "... FEC lanes is kept within limits ..."  
 On line 27 change "The Skew Variation must also be limited..." to "The Skew Variation is also limited ..."  
 Proposed Response Response Status O

CI 167 SC 167.5.4 P48 L30 # 244  
 Anslow, Pete Independent  
 Comment Type E Comment Status X  
 All occurrences of "must" have been removed from the 802.3 revision by comments 17 and 18 against D2.0. See:  
[https://www.ieee802.org/3/dc/comments/P8023\\_D2p0\\_comments\\_final\\_by\\_id.pdf#page=5](https://www.ieee802.org/3/dc/comments/P8023_D2p0_comments_final_by_id.pdf#page=5)  
 Remove the "must" in accordance with these changes.  
 SuggestedRemedy  
 Change:  
 "As an unavoidable consequence of the requirements for the setting of the SIGNAL\_DETECT parameter, implementations must provide adequate margin ..." to:  
 "As a consequence of the requirements for the setting of the SIGNAL\_DETECT parameter, implementations need to provide adequate margin ..."  
 Proposed Response Response Status O

CI 167 SC 167.7.3 P53 L32 # 245  
 Anslow, Pete Independent  
 Comment Type ER Comment Status X  
 Figure 167-3 is a bit map. This has several drawbacks: the rendition of the figure is poor making small text difficult to read, the use of bit maps increases the file size unnecessarily, the text content of the figures is not searchable and most importantly, including non-editable figures makes life difficult if changes are required in Maintenance after the figure has been incorporated into the next revision.  
 If it would help, I can provide a suitable .svg file together with the Octave script that generates it.  
 SuggestedRemedy  
 Since this figure illustrates equations, use a vector graphics (e.g., .svg) format and apply the annotations to the lines in FrameMaker.  
 Proposed Response Response Status O

CI 80 SC 80.1.1 P28 L10 # 246  
 Hajduczenia, Marek Charter Communications  
 Comment Type E Comment Status X  
 Clause number should be used - should be "167" and not "Clause 167"  
 The same problem is present in Table 116-4 and Table 116-5  
 SuggestedRemedy  
 Change "Clause 167" in Table 80-5 to "167". Make sure the link is live.  
 The same problem is present in Table 116-4 and Table 116-5  
 Proposed Response Response Status O

CI 116 SC 116.1.4 P37 L17 # 247  
 Hajduczenia, Marek Charter Communications  
 Comment Type E Comment Status X  
 Table 116-5 has unnecessary thick lines on the right-top side of the table around "400GBASE ZR PCS and" and "400GBASE-ZR PMD"  
 SuggestedRemedy  
 Remove unnecessary thick lines  
 Proposed Response Response Status O

EE 802.3db D2.0 100G,200G,400G Short Reach Fiber Task Force Initial Working Group ballot comment:

Cl 116 SC 116.1.4 P37 L17 # 248  
 Hajduczenia, Marek Charter Communications  
 Comment Type **ER** Comment Status **X**  
 Table 116-5 seems to have an unfinished term "400GBASE-ZR PCS and"  
 SuggestedRemedy  
 Seems like part of the statement was cut over? Restore the missing entry in the table  
 Proposed Response Response Status **O**

Cl 167 SC 167.7.3 P53 L53 # 249  
 Hajduczenia, Marek Charter Communications  
 Comment Type **ER** Comment Status **X**  
 Figure 167-3 is heavily rasterized. Consider using higher resolution figure  
 SuggestedRemedy  
 Per comment  
 Proposed Response Response Status **O**

Cl 167 SC 167.8.5 P56 L47 # 250  
 Hajduczenia, Marek Charter Communications  
 Comment Type **E** Comment Status **X**  
 Missing "continued" flag in Table 167-12 + missing heading tag. Alternatively, make sure the table does not break over pages.  
 SuggestedRemedy  
 Per comment  
 Proposed Response Response Status **O**

Cl 167 SC 167.11.4.6 P71 L30 # 251  
 Hajduczenia, Marek Charter Communications  
 Comment Type **ER** Comment Status **X**  
 OC12 mixes "or" with "\*" in the same Status entry. Use "INS and (SR2 or SR4):M" or alternatively "INS\*(SR2 + SR4):M" syntax.  
 The same in OC14. If "+ syntax is used, also consider changing OC8 and OC10.  
 SuggestedRemedy  
 Per comment  
 Proposed Response Response Status **O**

Cl 167 SC 167.11.4.6 P71 L25 # 252  
 Hajduczenia, Marek Charter Communications  
 Comment Type **ER** Comment Status **X**  
 Missing OC9 and OC13?  
 SuggestedRemedy  
 Renumber OC10-14  
 Proposed Response Response Status **O**