Cl **1**   *SC* **1**   *P***21**   *L***1**   # I-1

Byrd, William   PRIVACOM VENTURES, INC.

Comment Type **E**   *Comment Status* **D**   *EZ*

Where is the Introduction??? It is completely missing from my document. The Introduction appears at the bottom of page 21, with zero words under that title

SuggestedRemedy

Add the Introduction.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Move "1. Introduction" to the next page.

Cl **45**   *SC* **45.2.1.27b.6**   *P***35**   *L***25**   # I-2

Maguire, Valerie   The Siemon Company

Comment Type **E**   *Comment Status* **D**   *EZ*

Too many carriage returns between paragraphs.

SuggestedRemedy

Delete line 25.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **108**   *SC* **108.6**   *P***59**   *L***28**   # I-3

Maguire, Valerie   The Siemon Company

Comment Type **E**   *Comment Status* **D**   *EZ*

Too many carriage returns between paragraphs.

SuggestedRemedy

Delete line 28.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **158**   *SC* **158.8.1.1**   *P***78**   *L***54**   # I-4

Maguire, Valerie   The Siemon Company

Comment Type **E**   *Comment Status* **D**   *EZ*

Keep related text together.

SuggestedRemedy

Insert a non-breaking hyphen between "inverted" and "(i)".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **158**   *SC* **158.9.7**   *P***89**   *L***15**   # I-5

Maguire, Valerie   The Siemon Company

Comment Type **E**   *Comment Status* **D**   *EZ*

Keep related text together.

SuggestedRemedy

Make all hyphens in "10GBASE-BR10-D" non-breaking and make space between "e.g.," and "10GBASE-BR10-D" non-breaking.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **158**   *SC* **158.11.2.1**   *P***90**   *L***43**   # I-6

Maguire, Valerie   The Siemon Company

Comment Type **E**   *Comment Status* **D**   *EZ*

Keep related text together.

SuggestedRemedy

Make hyphen in "10GBASE-BR20" non-breaking.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **159**   *SC* **159.7.5.2**   *P***106**   *L***106**   # I-7

Maguire, Valerie   The Siemon Company

Comment Type **E**   *Comment Status* **D**   *EZ*

Keep related text together.

SuggestedRemedy

Make hyphens in "25GBASE-BR20" non-breaking.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

Comment ID **I-7**

Page 1 of 8
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Cl **159**   *SC* **159.8.7**   *P* **109**   *L* **36**   # I-8

Maguire, Valerie   The Siemon Company

Comment Type **E**   *Comment Status* **D**   EZ

Keep related text together.

SuggestedRemedy

Make all hyphens in "25GBASE-BR10-D" non-breaking and make space between "e.g.,"
and "25GBASE-BR10-D" non-breaking.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **160**   *SC* **160.8.7**   *P* **135**   *L* **28**   # I-9

Maguire, Valerie   The Siemon Company

Comment Type **E**   *Comment Status* **D**   EZ

Keep related text together.

SuggestedRemedy

Make all hyphens in "50GBASE-BR10-D" non-breaking and make space between "e.g.,"
and "50GBASE-BR10-D" non-breaking.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **158**   *SC* **158.8.1**   *P* **78**   *L* **44**   # I-10

Stassar, Peter   Huawei Technologies Co., Ltd

Comment Type **E**   *Comment Status* **D**

The wording "Test patterns are as in Table 158–11 for 10GBASE-BRx." can be improved

SuggestedRemedy

Modify to "Test patterns for 10GBASE-BRx are defined in Table 158–11 ."

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **158**   *SC* **158.8.1.1**   *P* **78**   *L* **49**   # I-11

Stassar, Peter   Huawei Technologies Co., Ltd

Comment Type **E**   *Comment Status* **D**   EZ

There should be no hyphen in "Test-pattern definition". There are various instances in the
draft mentioning "test-pattern", which all should be modified

SuggestedRemedy

Change heading to "Test pattern definition". Also for other instances of "test-pattern".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **158**   *SC* **158.8.1.1**   *P* **78**   *L* **51**   # I-12

Stassar, Peter   Huawei Technologies Co., Ltd

Comment Type **T**   *Comment Status* **D**

It is not clear what is meant by "Pattern 3 is optional."

SuggestedRemedy

Clarify the meaning of "Pattern 3 is optional.". Or alternatively remove this sentence,

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Delete "Pattern 3 is optional", in Table 158–10, add "Pattern 3 is optional." to the end of
note a.

Cl **160**   *SC* **160.6.1**   *P* **125**   *L* **26**   # I-13

Stassar, Peter   Huawei Technologies Co., Ltd

Comment Type **TR**   *Comment Status* **D**

The row for "Launch power in OMAouter minus TDECQ (min)" is an identical requirement
as the previous row and should therefore be deleted

SuggestedRemedy

Remove the row for "Launch power in OMAouter minus TDECQ (min)"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

Comment ID **I-13**   Page 2 of 8
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Cl **160**　　*SC* **160.6.1**　　　　*P***125**　　　*L***22**　　　# I-14

Stassar, Peter　　　　　　　　　Huawei Technologies Co., Ltd

Comment Type **T**　　　*Comment Status* **D**

The representation of the requirement for OMAmin is shown differently than in the equivalent specification in 139.6.1, where "Launch power in OMAouter minus TDECQ (min)". It could be useful to point that out in an extension to note b.

SuggestedRemedy

Add to Note b: even when the representation of the requirement OMAouter is different as used in a conventional way in Clause 139, it is completely consistent".

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Add to Note b: Even though the representation of the OMAouter requirement is different from that in Clause 139, they are consistent".

Cl **108**　　*SC* **108.1.2**　　　　*P***43**　　　*L***21**　　　# I-15

Laubach, Mark　　　　　　　　　IEEE member / Self Employed

Comment Type **E**　　　*Comment Status* **D**　　　　　　　　*EZ*

"Figure 108–1" needs to be a cross reference link.

SuggestedRemedy

Make it so.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **108**　　*SC* **108.1.3**　　　　*P***45**　　　*L***3**　　　# I-16

Laubach, Mark　　　　　　　　　IEEE member / Self Employed

Comment Type **E**　　　*Comment Status* **D**　　　　　　　　*EZ*

"Figure 108–1a" needs to be a cross reference link.

SuggestedRemedy

Make it so.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **108**　　*SC* **108.1.3.2**　　　　*P***46**　　　*L***3**　　　# I-17

Laubach, Mark　　　　　　　　　IEEE member / Self Employed

Comment Type **E**　　　*Comment Status* **D**　　　　　　　　*EZ*

"Figure 108–1b" needs to be a cross reference link.

SuggestedRemedy

Make it so.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **157**　　*SC* **157.1.2**　　　　*P***64**　　　*L***25**　　　# I-18

Laubach, Mark　　　　　　　　　IEEE member / Self Employed

Comment Type **E**　　　*Comment Status* **D**　　　　　　　　*EZ*

Figure 157-1 should appear in the text before Table 157-1. Table 157-1 should appear after the reference to it in the first part of 157.1.3, and etc for the other tables in this clause. I know these are Framemaker anchoring issues, but should be fixed if there is a revision.

SuggestedRemedy

Try to make it visually flow better than it is now.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

Cl **158**　　*SC* **158.13.4.3**　　　　*P***95**　　　*L***7**　　　# I-19

Laubach, Mark　　　　　　　　　IEEE member / Self Employed

Comment Type **E**　　　*Comment Status* **D**　　　　　　　　*EZ*

"Table 158–6" and "Table 158–7" (line 10) need to be cross reference links. Same for all other Table references on this page.

SuggestedRemedy

Make it so.

Proposed Response　　　*Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

Comment ID **I-19**　　　Page 3 of 8
3/15/2021 1:17:52 PM

Cl **158**   *SC* **158.13.4.6**   *P* **96**   *L* **7**   # I-20

Laubach, Mark   IEEE member / Self Employed

Comment Type **E**   *Comment Status* **D**   EZ

In other Value/Comment text in 158.13 PICS as well as throughout the draft, there is mixed convention to use "Clause 158.x". (e.g. page 93 line 47) versus omitting the world "Clause" (and just have the clause number). Consistency is needed.

SuggestedRemedy

Make subclause cross references consistent throughout the draft.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **159**   *SC* **159.12.4.3**   *P* **116**   *L* **10**   # I-21

Laubach, Mark   IEEE member / Self Employed

Comment Type **E**   *Comment Status* **D**   EZ

need spaces

SuggestedRemedy

Change "inTable 159–7" to "in Table 159–7" on line 10 and "inTable 159–6" to "in Table 159–6" on line 21

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **160**   *SC* **160.12.3.3**   *P* **141**   *L* **7**   # I-22

Laubach, Mark   IEEE member / Self Employed

Comment Type **E**   *Comment Status* **D**   EZ

"Table 160–6" needs to be a cross reference link. Same for all the "Table 160-x"'s on this page.

SuggestedRemedy

Make it so.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **108**   *SC* **108.1.3.1**   *P* **45**   *L* **23**   # I-23

Dawe, Piers J G   NVIDIA

Comment Type **E**   *Comment Status* **D**   EZ

Tidy up the block diagram

SuggestedRemedy

Move the paths rx_data-group<15:0> and rx_data-group<15:0> to the right to line up with the PCS Receive paths above. Move the right hand end of the FEC Decoder & Block Synchronization box to line up with the boxes above.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **108**   *SC* **108.5.1.1**   *P* **51**   *L* **16**   # I-24

Dawe, Piers J G   NVIDIA

Comment Type **E**   *Comment Status* **D**   EZ

"will" is deprecated

SuggestedRemedy

Change "It will form" to "It forms"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **108**   *SC* **108.2.1.2.3**   *P* **49**   *L* **9**   # I-25

Dawe, Piers J G   NVIDIA

Comment Type **TR**   *Comment Status* **D**

"The effect of receipt of this primitive by the FEC client is unspecified by the FEC sublayer": gratuitously unhelpful.

SuggestedRemedy

Change to:
The effect of receipt of this primitive by the FEC client (the PCS) is specified in Clause 49; see 49.2.
I think you will need to change Clause 49 to mention the FEC_UNITDATA.indication primitive, too.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change into "The effect of receipt of this primitive by the FEC client is unspecified by the FEC sublayer. See 49.2."

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

Comment ID **I-25**   Page 4 of 8
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Cl **108**   *SC* **108.2.1.3.3**   *P* **49**   *L* **36**   # I-26

Dawe, Piers J G   NVIDIA

Comment Type **ER**   *Comment Status* **D**

"The effect of receipt of this primitive by the FEC client is unspecified by the FEC sublayer": gratitously unhelpful.

SuggestedRemedy

Change to:
The effect of receipt of this primitive by the FEC client (the PCS) is specified in Clause 107; see 107.1.4.2.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Change into "The effect of receipt of this primitive by the FEC client is unspecified by the FEC sublayer. See 107.1.4.2."

Cl **108**   *SC* **108.6.3**   *P* **59**   *L* **37**   # I-27

Dawe, Piers J G   NVIDIA

Comment Type **T**   *Comment Status* **D**

This statement "the transmit and receive functions are disabled" is misleading.

SuggestedRemedy

Please change as P802.3ck has it for 91.6.2f: "the RS-FEC transmit and receive functions are disabled"

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **108**   *SC* **108.6.4**   *P* **59**   *L* **47**   # I-28

Dawe, Piers J G   NVIDIA

Comment Type **E**   *Comment Status* **D**

This variable is set to one to indicate that the decoder has the ability to bypass error correction. The variable is set to zero if this ability is not supported.

SuggestedRemedy

This variable is set to one if the decoder has the ability to bypass error correction. The variable is set to zero if this ability is not supported.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **108**   *SC* **108.7.3**   *P* **61**   *L* **32**   # I-29

Dawe, Piers J G   NVIDIA

Comment Type **T**   *Comment Status* **D**

Has the capability to disable the RS-FEC function
But 108.5.3.2 "This option shall not be used when the RS-FEC sublayer is used to form part of a 10GBASE-BR20, 25GBASE-SR, 25GBASE-LR, or 25GBASE-ER PHY."

SuggestedRemedy

The status should be conditional, not always mandatory

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
In 108.7.3, change status of EF into "(KR or CR): M"

Cl **158**   *SC* **158.5.4**   *P* **74**   *L* **37**   # I-30

Dawe, Piers J G   NVIDIA

Comment Type **T**   *Comment Status* **D**

This has a new/different requirement to all other signal detect definitions: "Implementations shall provide adequate margin between the input optical power level at which the SIGNAL_DETECT parameter is set to OK, and the inherent noise level of the PMD due to crosstalk, power supply noise, etc.". The original text was guidance for the designer, not a spec item. Implementers will expect to use existing 10G receiver designs for these PMDs

SuggestedRemedy

Change back to ""As an unavoidable consequence of the requirements for the setting of the SIGNAL_DETECT parameter, implementations must provide adequate margin between the input optical power level
at which the SIGNAL_DETECT parameter is set to OK, and the inherent noise level of the PMD due to crosstalk, power supply noise, etc.".
If necessary, change "must" to "should".

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Same comment as D2.3, #26.
Change "shall" to "should", change "due to" to "including the effects of".

Last two paragraphs of 158.5.4 become:
Implementations should provide adequate margin between the input optical power level at which the SIGNAL_DETECT parameter is set to OK, and the inherent noise level of the PMD including the effects of crosstalk, power supply noise, etc.
Various implementations of the Signal Detect function are permitted by this standard, including implementations that generate the SIGNAL_DETECT parameter values in response to the amplitude of the modulation of the optical signal and implementations that respond to the average optical power of the modulated optical signal.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

Comment ID **I-30**

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3/15/2021 1:17:52 PM

Cl **158**　　*SC* **158.5.4**　　　　*P* **74**　　　*L*　　　# I-31

Dawe, Piers J G　　　　　　　NVIDIA

Comment Type　**T**　　　*Comment Status*　**D**

The SD limit of >=-30 dBm is too near to the Average receive power (min) for 10GBASE-BR20, -27.2 dBm. 1000BASE-LX10 has -45 dBm.

SuggestedRemedy

Change -30 to a lower number. Preferably, put the limit in Table 158-7.

Proposed Response　　　*Response Status*　**W**

PROPOSED ACCEPT IN PRINCIPLE.
Suggest following the margin in Table 114–4 (SIGNAL_DETECT value definition), reserve about 5 dB.

Cl **158**　　*SC* **158.8.9.1**　　　*P* **81**　　*L* **25**　　# I-32

Dawe, Piers J G　　　　　　　NVIDIA

Comment Type　**T**　　　*Comment Status*　**X**

"The transmitted optical signal of the device under test and the reflectance of the optical link should be at their maximum levels.": First, 802.3 defines behaviour at interfaces, it does not define devices.
Second, there is no expectation that the transmitted signal be adjustable; the standards has provision for it to be on or off, only. The previous sentences say that the transmitter is on.

SuggestedRemedy

Change to "The reflectance of the optical link should be at its maximum level". Similarly in 158.8.9.2 (h), 159.7.10 (h) and 160.7.11

Proposed Response　　　*Response Status*　**W**

Input from Frank'Email on Feb. 27:
A possible resolution of this would be to require that "the optical return loss of the test link (ORLtest) is adjusted such that Optical return loss (test) = Optical return loss (min) + Average launch power (test) – Average launch power (max). "

Optical return loss (min) is from Table 158-12. Average launch power (max) is from Table 158-6.

This equation will produce a situation where the NEXT power is the same as in the worst case.

Apply the same change to Clauses 159 and 160.

Cl **158**　　*SC* **158.8.10.2**　　　*P* **87**　　*L* **34**　　# I-33

Dawe, Piers J G　　　　　　　NVIDIA

Comment Type　**T**　　　*Comment Status*　**D**

ANSI/TIA/EIA-455-175A-92 (for chromatic dispersion measurement)

SuggestedRemedy

Update to IEC 60793-1-42, as in 160.7.5.2

Proposed Response　　　*Response Status*　**W**

PROPOSED ACCEPT.

Cl **158**　　*SC* **158.8.10.3**　　　*P* **88**　　*L* **5**　　# I-34

Dawe, Piers J G　　　　　　　NVIDIA

Comment Type　**TR**　　　*Comment Status*　**D**

"corner frequency of less than or equal to 4 MHz": This is a definition, not a test procedure. It has to be unambiguous. Setting the CRU corner frequency far too low will fail acceptable transmitters.

SuggestedRemedy

Delete "less than or equal to"

Proposed Response　　　*Response Status*　**W**

PROPOSED ACCEPT.

Cl **158**　　*SC* **158.10**　　　*P* **89**　　*L* **39**　　# I-35

Dawe, Piers J G　　　　　　　NVIDIA

Comment Type　**T**　　　*Comment Status*　**D**

ANSI/TIA/EIA-526-14A/method B

SuggestedRemedy

This is for multimode? If so, delete, also from 159.9

Proposed Response　　　*Response Status*　**W**

PROPOSED ACCEPT IN PRINCIPLE.
Delete "ANSI/TIA/EIA-526-14A/method B, and", apply same change to 159.9

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

Comment ID **I-35**　　　　Page 6 of 8
3/15/2021 1:17:52 PM

Cl **158**   *SC* **158.13.1**   *P* **92**   *L* **7**   # I-36

Dawe, Piers J G   NVIDIA

Comment Type **E**   *Comment Status* **D**   EZ

Clause 158,Physical Medium

SuggestedRemedy

Insert space

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **159**   *SC* **159.12.4.4**   *P* **116**   *L* **15**   # I-37

Dawe, Piers J G   NVIDIA

Comment Type **E**   *Comment Status* **D**   EZ

blank lines? and following tables

SuggestedRemedy

Remove. Also 159.12.4.6 and following

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **159**   *SC* **159.12.4.4**   *P* **116**   *L* **21**   # I-38

Dawe, Piers J G   NVIDIA

Comment Type **E**   *Comment Status* **D**   EZ

inTable 159–6

SuggestedRemedy

Insert space

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

Cl **160**   *SC* **160.7.5.2**   *P* **129**   *L* **54**   # I-39

Dawe, Piers J G   NVIDIA

Comment Type **E**   *Comment Status* **D**   EZ

Notes detached from table

SuggestedRemedy

Remove blank line 41. Make the notes stay with the table.
Similar issue with Table 16-8.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Table 160-8 has the same format issue.

Cl **160**   *SC* **160.7.5.2**   *P* **130**   *L* **2**   # I-40

Dawe, Piers J G   NVIDIA

Comment Type **T**   *Comment Status* **D**

Similar to the change made to 158.8.10.2: The minimum and maximum chromatic dispersion for the compliance channel are calculated based on maximum length. For each PMD, if minimum and maximum CD are the same side of zero, a link with a shorter fibre and maybe some extra patch panel loss is not properly protected.

SuggestedRemedy

The same fix as for Table 158-13: add to note a:
The link may be as short as 2 m, and the minimum or maximum dispersion may be 0.

Proposed Response   *Response Status* **W**

PROPOSED ACCEPT.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general   Comment ID **I-40**   Page 7 of 8
COMMENT STATUS: D/dispatched A/accepted R/rejected   RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn   3/15/2021 1:17:52 PM
SORT ORDER: Comment ID

Cl **160**　　　*SC* **160.6.1**　　　*P***125**　　　*L***28**　　　#　I-41

Dawe, Piers J G　　　　　　　　　NVIDIA

Comment Type　**TR**　　*Comment Status*　**D**

As noted before:
You want these new PMDs to be buildable with existing receiver ICs, designed and qualified to the earlier PAM4 specs (200GBASE-DR4, 200GBASE-FR4, 200GBASE-LR4, 200GBASE-ER4, 50GBASE-FR, 50GBASE-LR and/or 50GBASE-ER).
The link and receiver need protection from both a weak signal (OMA-TDECQ limit) and a very bad signal (K and overshoot limits) because real affordable receivers have finite resolution, dynamic range, linearity and optimisation algorithm, unlike the ideal reference receiver for TDECQ.
In dB, TDECQ = C + K. C = 10log10(Ceq) = noise enhancement. K is the measure of signal quality.
Recent 100 Gb/s/lane PAM4 receivers are protected by over/under-shoot and transmitter power excursion limits.
Each of the three specs (K, over/under-shoot, and transmitter power excursion) can catch undesirable signals that the others miss, and that TDECQ misses too.
There are no separate measurements for these; they are by-products of waveform captures for TDECQ and TECQ.
Avoiding these very bad signals will help avoid error floors.

SuggestedRemedy

Reinstate the limit on K = TDECQ - 10log10(Ceq) max 3.2 dB for all three PMDs. Then at least there will be consistent protection across the 50Gb/s/lane family.
Add over/under-shoot limits as in the latest 802.3cu, for all three PMDs.
Add transmitter power excursion limits to the PMD(s) that need that protection (it depends on the receive max power).

Proposed Response　　　　*Response Status*　**W**

PROPOSED ACCEPT IN PRINCIPLE.

In Table 160-6 reinstate the row for "TDECQ – 10log10(Ceq)c (max)" with value 3.2 dB for all columns with a note c, "Ceq is a coefficient defined in 121.8.5.3, which accounts for the reference equalizer noise enhancement."

In this way the specification for 50 Gb/s PMDs in Clause 160 remain consistent with those in Clause 139.

Cl **160**　　　*SC* **160.6.1**　　　*P***125**　　　*L***26**　　　#

Wang, Ruoxu　　　　　　　　　Huawei

Comment Type　**T**　　*Comment Status*　**D**

"Launch power in OMAouter minus TDECQ (min)" is redundant. The OMAouter (min) for TDECQ from1.4 to 3.2 dB is already determined by the "Outer Optical Modulation Amplitude (OMAouter) (min)".

SuggestedRemedy

Delete the "Launch power in OMAouter minus TDECQ (min)" line.
The proposed reference table is shown on page 11 in https://www.ieee802.org/3/cp/public/2009/2009_3cp_Stassar_1.pdf for 100GBASE-FR1 and 100GBASE-LR1.

Proposed Response　　　　*Response Status*　**W**

PROPOSED ACCEPT.

Cl **160**　　　*SC* **160.6.1**　　　*P***125**　　　*L***38**　　　#

Wang, Ruoxu　　　　　　　　　Huawei

Comment Type　**T**　　*Comment Status*　**D**

Table 160-6 suggests for 50GBASE-BR20 an optical return loss tolerance (max) of 15 dB, whereas Table 160-11 suggests that this is 15.3 dB, which is not consistent. It needs to be either 15 or 15.3 dB in both Tables 160-6 and 160-11.

SuggestedRemedy

In table 160-6 line 38 , split the table into two columns and set "Optical return loss tolerance (max)" for 50GBASE-BR20 to 15.3dB.

Proposed Response　　　　*Response Status*　**W**

PROPOSED ACCEPT IN PRINCIPLE.
In Table 160-11, Row 50GBASE-BR20, change ORL from 15.3 dB into 15 dB.

TYPE: TR/technical required ER/editorial required GR/general required T/technical E/editorial G/general
COMMENT STATUS: D/dispatched A/accepted R/rejected　　RESPONSE STATUS: O/open W/written C/closed U/unsatisfied Z/withdrawn
SORT ORDER: Comment ID

Comment ID

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