*Cl* **1**     *SC* **1.4.178a**     *P* **15**     *L* **16**     # 1

Ran, Adee     Intel

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

While having a definition for DGD is a good idea, this definition is unclear and not very helpful for a reader.

What are "fractions of a pulse"?
What are the "two principal state of polatization"?
Are the fractions transmitted in two polarization states or received in two polarization states?
Is this a characteristic of a medium or of a transmitter?
"At reception" seems like a definition of a point in time, but it's actually two points in time separated by the DGD.

I assume that it is the difference in propagation time over an optical medium, between two perpendicular polarization modes (e.g. x and y). This does not involve a pulse or its fractions, a transmitter or or a receiver, just propagation time which is a basic physical property.

*SuggestedRemedy*

Consider rephrasing. Alternatively if this definition is based on some external document, refer to that document.

*Proposed Response*     *Response Status* **O**

---

*Cl* **114**     *SC* **114.6**     *P* **30**     *L* **4**     # 2

Ran, Adee     Intel

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

"type B1.1, B1.3, or B6_a single-mode fibers"

Where are these types defined? The reference to Table 114-12 does not help.

In 88.11.1 these types are mentioned with a reference IEC 60793-2-50.

*SuggestedRemedy*

Insert "IEC 60793-2-50" before the quoted text.

*Proposed Response*     *Response Status* **O**

---

*Cl* **114**     *SC* **114.1**     *P* **37**     *L* **1**     # 3

Ran, Adee     Intel

*Comment Type* **E**     *Comment Status* **X**

Table numbering discntinuity. This should be Table 114–11.

*SuggestedRemedy*

Renumber.

*Proposed Response*     *Response Status* **O**

---

*Cl* **114**     *SC* **114.8**     *P* **36**     *L* **30**     # 4

Slavick, Jeff     Broadcom Limited

*Comment Type* **TR**     *Comment Status* **X**

Have a shall statement but no matching PICS

*SuggestedRemedy*

Add COM10 for subclause 114.8

*Proposed Response*     *Response Status* **O**

---

*Cl* **108**     *SC* **108.7.4.2**     *P* **24**     *L* **30**     # 5

Slavick, Jeff     Broadcom Limited

*Comment Type* **TR**     *Comment Status* **X**

The "OR" operator is a + sign.

*SuggestedRemedy*

Change the 2 instances of "or" in the status column for RF3 to be + instead.

*Proposed Response*     *Response Status* **O**

---

*Cl* **114**     *SC* **114.11.4.6**     *P* **42**     *L* **30**     # 6

Slavick, Jeff     Broadcom Limited

*Comment Type* **E**     *Comment Status* **X**

Status column for CES* doesn't appear to be center justified

*SuggestedRemedy*

Make it center justified

*Proposed Response*     *Response Status* **O**

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* **6**

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*Cl* **FM**    *SC* **FM**             *P* **1**        *L* **2**        # 7
Remein, Duane             Huawei

*Comment Type* **ER**    *Comment Status* **X**
"Amendment of .. " Should list all pervious amendments.

*SuggestedRemedy*
Change to "Amendment of IEEE Std 802.3™-2015 as amended by IEEE Std 802.3bw™-2015, IEEE Std 802.3by™-2016,
IEEE Std 802.3bq™-2016, IEEE Std 802.3bp™-2016,  IEEE Std 802.3br™-2016,  IEEE Std 802.3bz™-2016, and IEEE Std 802.3bn™-2016" (There might possibly be other, check with Pete Anslow for the full list)

*Proposed Response*       *Response Status* **O**

---

*Cl* **FM**    *SC* **FM**             *P* **7**        *L* **16**      # 8
Remein, Duane             Huawei

*Comment Type* **ER**    *Comment Status* **X**
Missing list of WG  participants

*SuggestedRemedy*
Get list from Mr. Law (or Pete Anslow) and incorporate in draft.

*Proposed Response*       *Response Status* **O**

---

*Cl* **00**    *SC* **0**             *P* **1**        *L* **31**      # 9
Remein, Duane             Huawei

*Comment Type* **ER**    *Comment Status* **X**
Update copyright date

*SuggestedRemedy*
to 2017 in FM and footer of all Masters

*Proposed Response*       *Response Status* **O**

---

*Cl* **FM**    *SC* **FM**             *P* **10**     *L* **31**      # 10
Remein, Duane             Huawei

*Comment Type* **ER**    *Comment Status* **X**
I agree with the Editors note that you should list all amendment here.

*SuggestedRemedy*
Please update to current amendment list (get from Pete Anslow)

*Proposed Response*       *Response Status* **O**

---

*Cl* **45**    *SC* **45.2.1.6**        *P* **17**     *L* **10**      # 11
Remein, Duane             Huawei

*Comment Type* **E**    *Comment Status* **X**
Not quite all changes rows are shown as the reserved row will also change.

*SuggestedRemedy*
Change editing instruction: "Change the PMA/PMD type selection row in Table 45–7 to add 25GBASE PMDs as follows (only Bits, Name, R/W and, added Description text in row is shown). Change "reserved" line(s) as appropriate for values defined by this and other approved amendments:" Note this is quoted from most recent amendment with PMD name changed.

*Proposed Response*       *Response Status* **O**

---

*Cl* **108**    *SC* **108.7.3**        *P* **24**     *L* **13**      # 12
Remein, Duane             Huawei

*Comment Type* **E**    *Comment Status* **X**
Subclause references should be linked

*SuggestedRemedy*
Change "108.5.3.2" to hot link in 3 places (line 13, 15, & 29).

*Proposed Response*       *Response Status* **O**

---

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* **12**

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*Cl* **114**　　　*SC* **114.1**　　　　　　*P* **25**　　　*L* **35**　　　　# 13
Remein, Duane　　　　　　　　　　　　Huawei

*Comment Type*　**E**　　　*Comment Status*　**X**

Is there some special reason clauses are all listed in ascending order except for Cl 78?

*SuggestedRemedy*

Move Cl 78 to top of table

*Proposed Response*　　　*Response Status*　**O**

---

*Cl* **114**　　　*SC* **114.1.1**　　　　　　*P* **26**　　　*L* **36**　　　　# 14
Remein, Duane　　　　　　　　　　　　Huawei

*Comment Type*　**TR**　　　*Comment Status*　**X**

BER Objective is: "Support a BER of better than or equal to 10-12 at the MAC/PLS service interface (or the frame loss ration equivalent)". Here you state a BER of 5 x 10-5. Perhaps this is because here you refer to some other point (pre FEC?).

*SuggestedRemedy*

Clarify that this BER target is pre FEC. For example change "The bit error ratio (BER) shall be less than …" to "The bit error ratio (BER) measured at the PMD service interface shall be less than …"

*Proposed Response*　　　*Response Status*　**O**

---

*Cl* **114**　　　*SC* **114.1.1**　　　　　　*P* **26**　　　*L* **36**　　　　# 15
Remein, Duane　　　　　　　　　　　　Huawei

*Comment Type*　**TR**　　　*Comment Status*　**X**

Untestable requirement; "The bit error ratio (BER) shall be less than …" (also on line 40). Per text5 on pg 27 line 52 there is no requirement that this requirement can tested "TP1 and TP4 are informative reference points... (these test points will not typically be accessible in an implemented system)." All requirements should be testable, hence this should not be a requirement.

*SuggestedRemedy*

Change language to be informative, remove PICS CF3

*Proposed Response*　　　*Response Status*　**O**

---

*Cl* **114**　　　*SC* **114.5.6**　　　　　　*P* **29**　　　*L* **33**　　　　# 16
Remein, Duane　　　　　　　　　　　　Huawei

*Comment Type*　**E**　　　*Comment Status*　**X**

Spurious strike-thru font "the" in "b) If a PMD_fault is detected, then the PMD may set the PMD_global_transmit_disable …"

*SuggestedRemedy*

Remove the "the" that is in strike-thru font.

*Proposed Response*　　　*Response Status*　**O**

---

*Cl* **114**　　　*SC* **114.7.5.4**　　　　　*P* **35**　　　*L* **22**　　　　# 17
Remein, Duane　　　　　　　　　　　　Huawei

*Comment Type*　**E**　　　*Comment Status*　**X**

It would be a kindness to the reader to inform him/her what is being tested here.

*SuggestedRemedy*

Change section title from "Test procedure" to "TDP test procedure"

*Proposed Response*　　　*Response Status*　**O**

---

*Cl* **114**　　　*SC* **114.1**　　　　　　*P* **37**　　　*L* **14**　　　　# 18
Remein, Duane　　　　　　　　　　　　Huawei

*Comment Type*　**E**　　　*Comment Status*　**X**

Superfluous TLAs should be avoided. Here in Table 114-2 is the only instance of DGD. In order to use this text saving acronym you add 1.4.178a (pg 15) and footnote c to table 114-12. It would be much simpler just to use the real words.

*SuggestedRemedy*

Remove 1.4.178a and its associated Editing Instruction and footnote c in Table 114-12. Change "DCD_max" to "Differential group delay (max)".

*Proposed Response*　　　*Response Status*　**O**

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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* **18**　　　　　Page 3 of 11
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*Cl* **105**  *SC* **105.1.1**  *P* **20**  *L* **12**  # 19
Lewis, Jon  Dell EMC

*Comment Type* **E**  *Comment Status* **X**
On the bottom line of the paragraph you have 2 spaces before 25GBASE-SR once the edits are complete:  25GBASE-KR-S, and 25GBASE-SR

*SuggestedRemedy*
Remove one space.

*Proposed Response*  *Response Status* **O**


*Cl* **45**  *SC* **45.2.1.6**  *P* **17**  *L* **17**  # 20
Lusted, Kent  Intel

*Comment Type* **ER**  *Comment Status* **X**
In table 45-7, the PMA/PMD control 2 register bit definitions does not list the reserved values.

There already is an editors note to add these bit definitions "later".  Now is a great time to do it!  :)

*SuggestedRemedy*
Add the reserved bit definitions to Table 45-7

*Proposed Response*  *Response Status* **O**


*Cl* **114**  *SC* **114.5.1**  *P* **28**  *L* **19**  # 21
Winkel, Ludwig  Siemens AG

*Comment Type* **E**  *Comment Status* **X**
The text "For clarity, only one ..." is not appropriate as a key element of a Figure.

*SuggestedRemedy*
Move the text below or above the Figure and mark it as a NOTE

*Proposed Response*  *Response Status* **O**


*Cl* **114**  *SC* **114.6.1**  *P* **30**  *L* **35**  # 22
Winkel, Ludwig  Siemens AG

*Comment Type* **E**  *Comment Status* **X**
Inconsistenbt way to provide additional information to the description of the given values
for example
"Signaling rate (range) "
"Side-mode suppression ratio (SMSR), (min)"
where in the 2nd occurence a comma is used to separate the text in brackets and others are not using a comma to separate the brackets.

*SuggestedRemedy*
Harmonize! My preference is to use a comma. Alternatively consider to use the term in brackets as part of the sentense for example:
"Range of signaling rate".

*Proposed Response*  *Response Status* **O**


*Cl* **114**  *SC* **114.6.1**  *P* **30**  *L* **39**  # 23
Winkel, Ludwig  Siemens AG

*Comment Type* **E**  *Comment Status* **X**
The abbreviation min (also in other lines max) is not appropriate.

*SuggestedRemedy*
Write the full term instead of abbreviation "minimum" (respectively in other lines "maximum".

*Proposed Response*  *Response Status* **O**


*Cl* **114**  *SC* **114.2.1**  *P* **38**  *L* **37**  # 24
Winkel, Ludwig  Siemens AG

*Comment Type* **ER**  *Comment Status* **X**
Note shall not provide provisions and requirements. Note shall only provide statements of facts.

*SuggestedRemedy*
Reformat the note to a text.

*Proposed Response*  *Response Status* **O**


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* **24**

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*Cl* **114**  *SC* **114.6.1**  *P* **30**  *L* **40**  # 25

Kimber, Mark  Semtech

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

*SuggestedRemedy*

*Proposed Response*  *Response Status* **O**

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*Cl* **114**  *SC* **114.10**  *P* **37**  *L* **13**  # 26

Anslow, Pete  Ciena

*Comment Type* **E**  *Comment Status* **X**

Minus signs should be en-dash

*SuggestedRemedy*

Change the three minus signs in Table 114-12 to be en-dash (Ctrl-q Shft-p)

*Proposed Response*  *Response Status* **O**

---

*Cl* **114**  *SC* **114.11.4.1**  *P* **40**  *L* **7**  # 27

Anslow, Pete  Ciena

*Comment Type* **E**  *Comment Status* **X**

In item CF1, the comma after "PCS" is in underline font.

*SuggestedRemedy*

Remove the underline.

*Proposed Response*  *Response Status* **O**

---

*Cl* **FM**  *SC* **FM**  *P* **1**  *L* **25**  # 28

Anslow, Pete  Ciena

*Comment Type* **E**  *Comment Status* **X**

The initial text should list the other amendments (as announced so far).
This draft is for Working Group ballot, not Task Force review.

*SuggestedRemedy*

Change "This draft is an amendment of IEEE Std 802.3-2015." to:
"This draft is an amendment of IEEE Std 802.3-2015 as amended by IEEE Std 802.3bw-2015, IEEE Std 802.3by-2016, IEEE Std 802.3bq-2016, IEEE Std 802.3bp-2016, IEEE Std 802.3br-2016, IEEE Std 802.3bn-2016, IEEE Std 802.3bz-2016, IEEE Std 802.3bu-201x, and IEEE Std 802.3bv-201x."
Also, change "Draft D2.0 is prepared for Task Force review." to: "Draft D2.1 is prepared for Working Group ballot recirculation."

*Proposed Response*  *Response Status* **O**

---

*Cl* **FM**  *SC* **FM**  *P* **7**  *L* **13**  # 29

Anslow, Pete  Ciena

*Comment Type* **E**  *Comment Status* **X**

"P802.3cc Task Force name" should be "P802.3cc 25 Gb/s Ethernet over single-mode fiber Task Force"

*SuggestedRemedy*

Change "P802.3cc Task Force name" to "P802.3cc 25 Gb/s Ethernet over single-mode fiber Task Force" in two places

*Proposed Response*  *Response Status* **O**

---

*Cl* **FM**  *SC* **FM**  *P* **10**  *L* **31**  # 30

Anslow, Pete  Ciena

*Comment Type* **E**  *Comment Status* **X**

Insert the summaries for Amendments 4 (IEEE Std 802.3bp-2016) through 9 (IEEE Std 802.3bv-201x)

*SuggestedRemedy*

Insert the summaries for Amendments 4 (IEEE Std 802.3bp-2016) through 9 (IEEE Std 802.3bv-201x)

*Proposed Response*  *Response Status* **O**

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* **30**

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*Cl* **30**　　　*SC* **30.5.1.1.2**　　　*P* **16**　　　*L* **12**　　　# 31
Anslow, Pete　　　　　　　　　　　　　Ciena

*Comment Type*　**E**　　　*Comment Status*　**X**

IEEE Std 802.3bq-2016 has inserted an entry for 25GBASE-T after the entry for 25GBASE-SR. In order to be clear, the editing instruction needs to account for this.

*SuggestedRemedy*

Add "and before the entry for 25GBASE-T (as inserted by IEEE Std 802.3bq-2016)" to the end of the editing instruction.

*Proposed Response*　　　*Response Status*　**O**

---

*Cl* **45**　　　*SC* **45.2.1.7.4**　　　*P* **17**　　　*L* **26**　　　# 32
Anslow, Pete　　　　　　　　　　　　　Ciena

*Comment Type*　**E**　　　*Comment Status*　**X**

IEEE Std 802.3bq-2016 has inserted a row for 25GBASE-T after the row for 25GBASE-SR. In order to be clear, the editing instruction needs to account for this.

*SuggestedRemedy*

Change "as follows" to "and before 25GBASE-T (as inserted by IEEE Std 802.3bq-2016) as follows".

*Proposed Response*　　　*Response Status*　**O**

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*Cl* **45**　　　*SC* **45.2.1.7.5**　　　*P* **17**　　　*L* **40**　　　# 33
Anslow, Pete　　　　　　　　　　　　　Ciena

*Comment Type*　**E**　　　*Comment Status*　**X**

IEEE Std 802.3bq-2016 has inserted a row for 25GBASE-T after the row for 25GBASE-SR. In order to be clear, the editing instruction needs to account for this.

*SuggestedRemedy*

Change "as follows" to "and before 25GBASE-T (as inserted by IEEE Std 802.3bq-2016) as follows".

*Proposed Response*　　　*Response Status*　**O**

---

*Cl* **45**　　　*SC* **45.2.1.8**　　　*P* **17**　　　*L* **53**　　　# 34
Anslow, Pete　　　　　　　　　　　　　Ciena

*Comment Type*　**E**　　　*Comment Status*　**X**

IEEE Std 802.3bq-2016 has inserted a row for 25GBASE-T after the row for 25GBASE-SR. In order to be clear, the editing instruction needs to account for this.

*SuggestedRemedy*

Change "as follows" to "and before 25GBASE-T (as inserted by IEEE Std 802.3bq-2016) as follows".

*Proposed Response*　　　*Response Status*　**O**

---

*Cl* **45**　　　*SC* **45.2.1.14b.aa**　　　*P* **18**　　　*L* **36**　　　# 35
Anslow, Pete　　　　　　　　　　　　　Ciena

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

25GBASE-ER ability is bit 1.19.7 and 25GBASE-LR ability is bit 1.19.6

*SuggestedRemedy*

In the title and text of 45.2.1.14b.aa change 1.19.6 to 1.19.7 (in 3 places).
In the title and text of 45.2.1.14b.ab change 1.19.5 to 1.19.6 (in 3 places).

*Proposed Response*　　　*Response Status*　**O**

---

*Cl* **78**　　　*SC* **78.1.4**　　　*P* **19**　　　*L* **7**　　　# 36
Anslow, Pete　　　　　　　　　　　　　Ciena

*Comment Type*　**E**　　　*Comment Status*　**X**

IEEE Std 802.3bq-2016 has inserted a row for 25GBASE-T after the row for 25GBASE-SR. In order to be clear, the editing instruction needs to account for this.

*SuggestedRemedy*

Change "as follows" to "and before 25GBASE-T (as inserted by IEEE Std 802.3bq-2016) as follows".

*Proposed Response*　　　*Response Status*　**O**

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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* **36**

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*Cl* **105**　　*SC* **105.1.1**　　　　　*P* **20**　　　*L* **7**　　　　# 37
Anslow, Pete　　　　　　　　　　　　　Ciena

*Comment Type*　**E**　　　*Comment Status*　**X**
The first paragraph of 105.1.1 has been modified by IEEE Std 802.3bq-2016

*SuggestedRemedy*
In the editing instruction change "(as added by IEEE Std 802.3by-2016)" to "(as added by IEEE Std 802.3by-2016 and modified by IEEE Std 802.3bq-2016)"
In the text, take account of the addition of ", and 25GBASE-T" by 802.3bq and remove the underline from the final "."

*Proposed Response*　　　*Response Status*　**O**

---

*Cl* **105**　　*SC* **105.1.3**　　　　　*P* **21**　　　*L* **1**　　　　# 38
Anslow, Pete　　　　　　　　　　　　　Ciena

*Comment Type*　**E**　　　*Comment Status*　**X**
IEEE Std 802.3bq-2016 has inserted a row for 25GBASE-T after the row for 25GBASE-SR. In order to be clear, the editing instruction needs to account for this.

*SuggestedRemedy*
Change "as follows" to "and before 25GBASE-T (as inserted by IEEE Std 802.3bq-2016) as follows".

*Proposed Response*　　　*Response Status*　**O**

---

*Cl* **105**　　*SC* **105.2**　　　　　*P* **21**　　　*L* **17**　　　　# 39
Anslow, Pete　　　　　　　　　　　　　Ciena

*Comment Type*　**E**　　　*Comment Status*　**X**
Table 105-2 has been modified by IEEE Std 802.3bq-2016

*SuggestedRemedy*
In the editing instruction change "(as inserted by IEEE Std 802.3by-2016)" to "(as inserted by IEEE Std 802.3by-2016 and modified by IEEE Std 802.3bq-2016)"
In Table 105-2, change the heading "Clause" to "Clause/Annex"

*Proposed Response*　　　*Response Status*　**O**

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*Cl* **105**　　*SC* **105.3.5**　　　　　*P* **22**　　　*L* **5**　　　　# 40
Anslow, Pete　　　　　　　　　　　　　Ciena

*Comment Type*　**E**　　　*Comment Status*　**X**
"Modify" is not a valid editing instruction.

*SuggestedRemedy*
Change "Modify" to "Change"

*Proposed Response*　　　*Response Status*　**O**

---

*Cl* **105**　　*SC* **105.5**　　　　　*P* **22**　　　*L* **12**　　　　# 41
Anslow, Pete　　　　　　　　　　　　　Ciena

*Comment Type*　**E**　　　*Comment Status*　**X**
The insertion by 802.3bq is "25GBASE-T PHY" not "25GBASE-T PMD".
Also, the 25GBASE-T entry in this table is different from the other PMD entries because it includes several other sublayer functions such as PCS, FEC and PMA. Consequently, and to be consistent with previous tables the new entries would be better above 25GBASE-T.

*SuggestedRemedy*
Change the editing instruction to: "Insert two new rows below 25GBASE-SR PMD in Table 105-3 (as added by IEEE Std 802.3bq-2016) and above 25GBASE-T (as inserted by IEEE Std 802.3bq-2016) as follows:

*Proposed Response*　　　*Response Status*　**O**

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*Cl* **108**　　*SC* **108.7.3**　　　　　*P* **24**　　　*L* **13**　　　　# 42
Anslow, Pete　　　　　　　　　　　　　Ciena

*Comment Type*　**E**　　　*Comment Status*　**X**
The other PICS items for optional PMD support do not have entries in the Subclause column and 108.5.3.2 here does not help much.

*SuggestedRemedy*
Remove the two entries for 108.5.3.2 in 108.7.3 (or at least make them cross-references).

*Proposed Response*　　　*Response Status*　**O**

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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* **42**　　　Page 7 of 11
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*Cl* **108**     *SC* **108.7.4.2**          *P* **24**          *L* **24**          # 43
Anslow, Pete                              Ciena

*Comment Type*  **E**     *Comment Status*  **X**
   "Modify" is not a valid editing instruction.
   The entry in the Status column is not shown as a change from the version in 802.3by.

*SuggestedRemedy*
   Change "Modify" to "Change".
   Show the entry in the Status column as a change from the version in 802.3by.

*Proposed Response*        *Response Status*  **O**


*Cl* **114**     *SC* **114.1**          *P* **25**          *L* **43**          # 44
Anslow, Pete                              Ciena

*Comment Type*  **E**     *Comment Status*  **X**
   The cross reference to 105.2 should be to 105.3

*SuggestedRemedy*
   Change the cross reference to be to 105.3.

*Proposed Response*        *Response Status*  **O**


*Cl* **114**     *SC* **114.5.6**          *P* **29**          *L* **32**          # 45
Anslow, Pete                              Ciena

*Comment Type*  **E**     *Comment Status*  **X**
   In item a) "in Table 114.6" is a cross-reference to heading 114.6 but it should be a cross-reference to Table 114-6.
   In item b) there is a spurious "the" in strikethrough font.

*SuggestedRemedy*
   In item a) change the cross-reference to be to Table 114-6.
   In item b) delete the spurious "the" in strikethrough font.

*Proposed Response*        *Response Status*  **O**


*Cl* **114**     *SC* **114.6**          *P* **30**          *L* **8**          # 46
Anslow, Pete                              Ciena

*Comment Type*  **TR**     *Comment Status*  **X**
   This says "The 25GBASE-ER PMD interoperates with the 25GBASE-LR PMD provided that the channel requirements for 25GBASE-LR are met".
   However, a 25GBASE-ER transmitter can launch 6 dBm average power and the channel requirements for 25GBASE-LR allow 0 dB loss, so the 25GBASE-LR receiver could see 6 dBm average power, which is above the 2 dBm average power (max) spec.

*SuggestedRemedy*
   Either remove the statement about interoperation or modify the specifications so that the PMDs will interoperate.

*Proposed Response*        *Response Status*  **O**


*Cl* **114**     *SC* **114.6.2**          *P* **32**          *L* **14**          # 47
Anslow, Pete                              Ciena

*Comment Type*  **T**     *Comment Status*  **X**
   The damage threshold for 25GBASE-LR is a long way above the maximum average power of 2 dBm, but is not enough to protect against accidental connection with a 25GBASE-ER transmitter which could emit 6 dBm average power.

*SuggestedRemedy*
   If it is feasible, increase the damage threshold to 6 dBm to protect against accidental connection with a 25GBASE-ER transmitter.
   If this is not feasible, then reduce the damage threshold to something more reasonable.

*Proposed Response*        *Response Status*  **O**


*Cl* **114**     *SC* **114.6.2**          *P* **32**          *L* **18**          # 48
Anslow, Pete                              Ciena

*Comment Type*  **TR**     *Comment Status*  **X**
   The average receive power (min) for 25GBASE-ER is -19.6 dBm.  However, the average launch power (min) is -3 dBm and the channel insertion loss (max) is 18 dB, so this should be -21 dBm.

*SuggestedRemedy*
   Change the average receive power (min) for 25GBASE-ER to -21 dBm.

*Proposed Response*        *Response Status*  **O**


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* **48**

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*Cl* **114**    *SC* **114.6.2**    *P* **32**    *L* **26**    # 49
Anslow, Pete    Ciena

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

For 25GBASE-LR the receiver sensitivity (OMA) is -11.3 dBm and the Vertical eye closure
penalty is 1.9 dB.  This means that the stressed receiver sensitivity should be -9.4 dBm.
For 25GBASE-ER the receiver sensitivity (OMA) is -19 dBm and the Vertical eye closure
penalty is 1.9 dB.  This means that the stressed receiver sensitivity should be -17.1 dBm.

*SuggestedRemedy*

For 25GBASE-LR change the stressed receiver sensitivity to -9.4 dBm.
For 25GBASE-ER change the stressed receiver sensitivity to -17.1 dBm.

*Proposed Response*    *Response Status* **O**

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*Cl* **114**    *SC* **114.9**    *P* **36**    *L* **35**    # 50
Anslow, Pete    Ciena

*Comment Type* **E**    *Comment Status* **X**

"100GBASE-LR and 100GBASE-ER" should be "100GBASE-LR4 and 100GBASE-ER4"

*SuggestedRemedy*

Change "100GBASE-LR and 100GBASE-ER" to "100GBASE-LR4 and 100GBASE-ER4"

*Proposed Response*    *Response Status* **O**

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*Cl* **99**    *SC*    *P* **7**    *L* **13**    # 51
Jones, Peter    Cisco

*Comment Type* **E**    *Comment Status* **X**

Text says

David Lewis, IEEE P802.3cc Task Force name Task Force Chair
Kohichi R. Tamura, IEEE P802.3cc Task Force name Task Force Editor-in-Chief

*SuggestedRemedy*

remove the repeated "Task Force name" from these two lines.

*Proposed Response*    *Response Status* **O**

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*Cl* **114**    *SC* **5.6**    *P* **29**    *L* **33**    # 52
Stassar, Peter    Huawei

*Comment Type* **ER**    *Comment Status* **X**

There is a spurious "the" in strike-through

*SuggestedRemedy*

Remove the "the" in strike-through

*Proposed Response*    *Response Status* **O**

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*Cl* **114**    *SC* **6**    *P* **30**    *L* **7**    # 53
Stassar, Peter    Huawei

*Comment Type* **TR**    *Comment Status* **X**

The following statement is included: The 25GBASE-ER PMD interoperates with the
25GBASE-LR PMD provided that the channel requirements for 25GBASE-LR are met.
The current parameter values in Tables 114-6 and Table 114-7 do not support this
statement.
The Average Launch power (max) of the ER transmitter is 6 dBm, which is above the
damage threshold of the LR receiver and the maximum average receiver power of the LR
receiver (2dBm), not allowing zero loss in the link. Actually in this case the minimum loss
would need to be 4 dB which would be not acceptable. In a similar way the max OMA value
of the ER transmitter is 3.8dB higher than the maximum receive OMA of the LR receiver.
The other way around the maximum power into a ER receiver from an LR transmitter is 2
dBm, 5 dB above the damage threshold of the ER receiver and even 6dB above the
maximum receive power of -4dB of the ER receiver.

*SuggestedRemedy*

Option 1: significantly increase the values of the ER receiver for Damage Threshold,
maximum average receive power and Receive power (OMA), (Max) to match the
performance of the LR receiver.
Additionally reduce the Average launch power (max) and the OMA max of the ER
transmitter to be below the maximum power values for the LR receiver.

The first of the 2 required changes may be extremely difficult for implementations
deploying APD receivers and therefore the following option 2 is provided for consideration:
Option 2: remove the statement "The 25GBASE-ER PMD interoperates with the 25GBASE-
LR PMD provided that the channel requirements for 25GBASE-LR are met." plus reduce
the center wavelength range for the ER receiver in Table 114-7 from 1295 - 1325 nm to
1295 - 1310nm (as specified for the ER transmitter)

*Proposed Response*    *Response Status* **O**

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
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*Cl* **114**    *SC* **114.1**    *P* **25**    *L* **49**    # 54

Trowbridge, Steve    Nokia

*Comment Type*    **E**    *Comment Status*    **X**

Unnecessary 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.)." While this isn't untrue, it adds nothing to say it. Most similar clauses do not seem to have a sentence like this. 802.3by (unnecessarily) does.

*SuggestedRemedy*

Delete the sentence

*Proposed Response*    *Response Status*    **O**

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*Cl* **114**    *SC* **114.6.2**    *P* **32**    *L* **16**    # 55

Dudek, Mike    Cavium

*Comment Type*    **TR**    *Comment Status*    **X**

Section 114.6 says that the ER and LR will interoperate provided the channel meets the LR specifications. The LR specifications do not include a minimum attenuation, therefore it must be assumed that the minimum attenuation is 0dB. The Receivers must therefore not overload with the highest OMA and average power that either LR or ER provides.

*SuggestedRemedy*

Change the damage threshold to 7dBm for both LR and ER. Change the average receive power (max) to 6dBm for both LR and ER. Change the Receive power (OMA) Max to 6dBm for both LR and ER. Add afootnote to these rows equivalent to footnote b in table 88-8

*Proposed Response*    *Response Status*    **O**

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*Cl* **114**    *SC* **114.6.2**    *P* **32**    *L* **19**    # 56

Tamura, Kohichi    Oclaro

*Comment Type*    **TR**    *Comment Status*    **X**

"Average receive power (min)" is -19.6dBm, but it should be -21dBm because "Average launch power (min)" is -3dBm and "Channel loss" is 18dB.

*SuggestedRemedy*

Change "Average receive power (min)" to -21dBm.

*Proposed Response*    *Response Status*    **O**

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*Cl* **114**    *SC* **114.6.1**    *P* **30**    *L* **47**    # 57

Huang, Xi    Huawei Technologies

*Comment Type*    **TR**    *Comment Status*    **X**

(Only for 25GBASE-ER ) It is the same reason with Line 46, the OMA min is shifted 2.8dB, so as OMA min-TDP

*SuggestedRemedy*

1.8

*Proposed Response*    *Response Status*    **O**

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*Cl* **114**    *SC* **114.6.2**    *P* **32**    *L* **18**    # 58

Huang, Xi    Huawei Technologies

*Comment Type*    **TR**    *Comment Status*    **X**

(Only for 25GBASE-ER ), we change the average power in Tx side to 2.8dB in Line 46, Page 30, to keep 18dB link power budget, the Average receiver power (Min) should be +2.8-18=-16.8dBm

*SuggestedRemedy*

-16.8

*Proposed Response*    *Response Status*    **O**

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*Cl* **114**    *SC* **114.6.2**    *P* **32**    *L* **24**    # 59

Huang, Xi    Huawei Technologies

*Comment Type*    **TR**    *Comment Status*    **X**

(Only for 25GBASE-ER ),To allow lower cost pin based implementation for 25G SMF 40Km, link budget shifts the 2.8 dB of OMA from the receiver to the transmitter. Thus, supports all 4 combination of the device type, i.e., EML/DML+PIN and EML/DML+APD. We think Receiver sensitivity (OMA), (max) of -16.2dBm is reasonable. See our corresponding proposal for clarification.

*SuggestedRemedy*

-16.2

*Proposed Response*    *Response Status*    **O**

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TYPE: TR/technical required  ER/editorial required  GR/general required  T/technical  E/editorial  G/general
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*Comment ID* **59**

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*Cl* **114**　　　*SC* **114.6.2**　　　　　*P* **32**　　　*L* **26**　　　# 60

Huang, Xi　　　　　　　　　　　Huawei Technologies

*Comment Type* **TR**　　　*Comment Status* **X**

(Only for 25GBASE-ER ),In D2.0, the gap between Receiver sensitivity (OMA), (max) and Stressed receiver sensitivity (OMA), (max) is 2.5dB. We use the same value to shift the Stressed receiver sensitivity (OMA), (max) from -16.5dBm to -13.7dBm.

*SuggestedRemedy*

-13.7

*Proposed Response*　　　*Response Status* **O**

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*Cl* **114**　　　*SC* **114.6.1**　　　　　*P* **30**　　　*L* **42**　　　# 61

Huang, Xi　　　　　　　　　　　Huawei Technologies

*Comment Type* **TR**　　　*Comment Status* **X**

(Only for 25GBASE-ER )To allow lower cost PIN based implementation, the Average launch power（min）need to increase from -3dBm to -0.2dBm (2.8dB increment).

*SuggestedRemedy*

-0.2

*Proposed Response*　　　*Response Status* **O**

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*Cl* **114**　　　*SC* **114.6.1**　　　　　*P* **30**　　　*L* **46**　　　# 62

Huang, Xi　　　　　　　　　　　Huawei Technologies

*Comment Type* **TR**　　　*Comment Status* **X**

(Only for 25GBASE-ER ) Based on DML or EML, Tx side has the capability to achieve 2.8dBm in OMA. See our corresponding proposal for clarification

*SuggestedRemedy*

2.8

*Proposed Response*　　　*Response Status* **O**

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
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*Comment ID* **62**

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