Cl **0** *SC* **0** *P* **0** *L* # R1-3

Nicholl, Gary — Cisco Systems, Inc.

Comment Type **E** *Comment Status* **A** *new famemaker template*

Implement new FM template (Version 4.4)

SuggestedRemedy

Implement new FM template (Version 4.4), based on the email from Pete Anslow to the 802.3_EDITORS reflector on 10/30/2020

Response *Response Status* **C**

ACCEPT.

Cl **140** *SC* **140.6.1** *P* **43** *L* **15** # R1-1

Stassar, Peter — Huawei Technologies Co., Ltd

Comment Type **TR** *Comment Status* **A** *power excursion*

Transmitter power excursion (max) should be in "dB" instead of "dBm"

SuggestedRemedy

Change "dBm" to "dB"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

During Task Force discussion on this comment, it was determined that dBm is the correct units but as a result of the discussion it was found that some changes to the power excursion parameter should be made.

Change the value of the Transmitter power excursion (max) parameter for 100GBASE-LR1 from "2.5 dBm" to "2.8 dBm"

Cl **140** *SC* **140.6.1** *P* **43** *L* **17** # R1-11

Dawe, Piers J G — Mellanox Technologies

Comment Type **E** *Comment Status* **A** *TECQ description*

Table 160-6 has "TECQ (max)" while Table 151-7 has "Transmitter eye closure for PAM4 (TECQ), each lane (max)"

SuggestedRemedy

Change to "Transmitter eye closure for PAM4 (TECQ) (max)"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Presume the comment is referring to Table 140-6 and not Table 160-6.

Change the TECQ description in Table 140-6 to "Transmitter eye closure for PAM4 (TECQ) (max)"

Cl **140** *SC* **140.6.3** *P* **47** *L* **32** # R1-10

Nicholl, Gary — Cisco Systems, Inc.

Comment Type **T** *Comment Status* **A** *wavelegnth reference*

In footnote (b) of Table 140-8 it is probably unnecessary to reference the wavelength at which the fiber attentuaion is 0.43 dB/km. In an earlier revision footnote (a) of Table 140-8 was changed to remove the reference to the wavelength, thus making footnotes (a) and (b) inconsistent. There is also no reference to the wavelength in footnote (a) of Table 151-9.

SuggestedRemedy

Remove "at 1304.5 nm" from footnote (b) of Table 140-8.

Response *Response Status* **C**

ACCEPT.

Cl **140** *SC* **140.7.5.2** *P* **51** *L* **43** # R1-15

Dawe, Piers J G — Mellanox Technologies

Comment Type **T** *Comment Status* **A** *wording change*

802.3 doesn't specify devices, it specifies interfaces

SuggestedRemedy

Change "device" to "transmitter" (twice in this subclause).
Had this been a WDM PMD, it would have been "lane under test".

Response *Response Status* **C**

ACCEPT.

Cl **140** *SC* **140.7.5b** *P* **52** *L* **19** # R1-7

Nicholl, Gary — Cisco Systems, Inc.

Comment Type **E** *Comment Status* **A** *overshoot*

Over/Under-shoot is only applicable for 100GBASE-FR1 and 100GBASE-LR1, and not for 100GBASE-DR.

SuggestedRemedy

Add "for 100GBASE-FR1 and 100GBASE-LR1" after "Table 140-6" in the first sentence of 140.7.5b

Response *Response Status* **C**

ACCEPT.

Cl **140** *SC* **140.7.5c** *P* **52** *L* **53** # R1-8

Nicholl, Gary — Cisco Systems, Inc.

Comment Type **E** *Comment Status* **A** *power excursion*

Transmitter power excursion is only applicable for 100GBASE-FR1 and 100GBASE-LR1, and not for 100GBASE-DR.

SuggestedRemedy

Add "for 100GBASE-FR1 and 100GBASE-LR1" after "Table 140-6" in the first sentence of 140.7.5c

Response *Response Status* **C**

ACCEPT.

Cl **140** *SC* **140.10a** *P* **58** *L* **3** # R1-9

Nicholl, Gary — Cisco Systems, Inc.

Comment Type **E** *Comment Status* **A** *interop guidelines*

"Recommendations for interoperation" is a more appropriate description than "Guidelines for interoperation" in this section.

SuggestedRemedy

Replace "Guidelines" with "Recommendations" throughout subclause 140.10a. Make a similar change for 151.12.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Delete "Guidelines for" throughout subclause 140.10a. Make a similar change for subclause 151.12.

Cl **140** *SC* **140.10a.1** *P* **59** *L* **12** # R1-12

Dawe, Piers J G — Mellanox Technologies

Comment Type **TR** *Comment Status* **R** *10LogCeq*

As pointed out in D3.0 comment 65, a 100GBASE-FR1 or 100GBASE-LR1 transmitter is allowed to transmit a bad signal that a 100GBASE-DR may not, and that a 100GBASE-DR receiver is not qualified for. This breaks interoperability. The K limit is missing, and the over/under-shoot, while useful, does not catch all bad transmitters that would fail the K limit. The response to comment 65 does not address the failure of interoperability, it only says that there was a previous decision to remove the K limit. Comment 65 and this one point out that that should be changed.

SuggestedRemedy

As interoperability with 100GBASE-DR applies over much shorter distances than the full distance for 100GBASE-FR1 or 100GBASE-LR1,
and as it is expected that decent transmitters will have no problem meeting the spec proposed below, and there is no extra measurement needed,
In Table 140-6, insert a limit of 3.4 dB for TECQ - 10log10(Ceq') (max), derived from TECQ in the same way that K = TDECQ - 10log10(Ceq) is derived from TDECQ

Response *Response Status* **U**

REJECT.

This comment is considered substantively similar to the previously rejected comment i-65.

The comment is again arguing that the over/under-shoot test, while useful, does not catch all bad transmitters that would fail a K limit (10LogCeq) test, and therefore leaves the potential for 100GBASE-FR1 and 100GBASE-LR1 transmitters that would not interoperate with a 100GBASE-DR receiver.

Note that the "TDECQ-10log10(Ceq)" parameter for 100GBASE-FR1 and 100GBASE-LR1 was removed in draft D2.0 and replaced with the over/under-shoot parameter.

The response to i-65 is shown here for reference:

"
REJECT.

The comment is proposing a value for a parameter that is not currently in Draft D3.0, for 100GBASE-FR1.

The IEEE P802.3cu Task Force reviewed this parameter previously during both task force review and working group ballot, and reached consensus to not include it.

While the comment does not request the addition of this parameter into the draft, that may have been the intention of the commenter.

There is no consensus to make the proposed change."

Cl **151** *SC* **151.5.7** *P* **70** *L* **2** # R1-13

Dawe, Piers J G — Mellanox Technologies

Comment Type **E** *Comment Status* **A** *unnecessary text*

the average launch power of the OFF transmitter in Table 151–8 for 400GBASE-FR4 and 400GBASE-LR4-6

SuggestedRemedy

Change and to or, or better, delete "for 400GBASE-FR4 and 400GBASE-LR4-6". Also in 151.5.8.

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

- Delete "for 400GBASE-FR4 and 400GBASE-LR4-6" at the end of line 3 on page 70.
- Delete "for 400GBASE-FR4 and 400GBASE-LR4-6" at the end of line 15 on page 70.

Cl **151** *SC* **151.7.1** *P* **72** *L* **33** # R1-2

Stassar, Peter — Huawei Technologies Co., Ltd

Comment Type **TR** *Comment Status* **A** *power excursion*

Transmitter power excursion (max) should be in "dB" instead of "dBm"

SuggestedRemedy

Change "dBm" to "dB"

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

During Task Force discussion on this comment, it was determined that dBm is the correct units but as a result of the discussion it was found that some changes to the power excursion parameter should be made.

Change the value of the Transmitter power excursion (max) parameter for 400GBASE-FR4 from "1.5 dBm" to "1.8 dBm" and for 400GBASE-LR4-6 from "2.2 dBm" to "2.5dBm".

Cl **151** *SC* **151.8.2** *P* **79** *L* **48** # R1-4

Nicholl, Gary — Cisco Systems, Inc.

Comment Type **E** *Comment Status* **A** *unnecessary text*

There is no need to state "for 400GBASE-FR4 and 400GBASE-LR4-6" in the first sentence of 151.8.2.

SuggestedRemedy

Delete "for 400GBASE-FR4 and 400GBASE-LR4-6" in the first sentence of subclause 151.8.2. Make an equivalent change in 151.8.3, 151.8.6, 151.8.9, 151.8.10, 151.8.12 and 151.8.13.

Response *Response Status* **C**

ACCEPT.

Cl **151** *SC* **151.8.2** *P* **79** *L* **48** # R1-5

Nicholl, Gary — Cisco Systems, Inc.

Comment Type **E** *Comment Status* **A** *comma*

There is an unnecessary comma in the first sentence of 151.8.2, 151.8.10, 151.8.12 and 151.8.13.

SuggestedRemedy

Remove the unnecessary comma in the first sentence of 151.8.2, 151.8.10, 151.8.12 and 151.8.13.

Response *Response Status* **C**

ACCEPT.

Cl **151** *SC* **151.8.5** *P* **80** *L* **20** # R1-14

Dawe, Piers J G — Mellanox Technologies

Comment Type **E** *Comment Status* **A** *spelling*

Thompson

SuggestedRemedy

Thomson 3 times in this subclause, twice in 151.8.10

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

- Replace "Thompson" with "Thomson (3 instances) in subclause 151.8.5
- Replace "Thompson" with "Thomson (2 instances) in subclause 151.8.10

Cl **151** *SC* **151.8.5.1** *P* **80** *L* **40** # R1-16

Dawe, Piers J G — Mellanox Technologies

Comment Type **T** *Comment Status* **A** *wording change*

802.3 doesn't specify devices, it specifies interfaces. And the dispersion is different for the four wavelengths.

SuggestedRemedy

Change "device" to "lane" (twice in this subclause).

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Change "device" to "transmitter lane" (twice in this subclause).

Cl **151** *SC* **151.8.8** *P* **81** *L* **36** # R1-17

Dawe, Piers J G — Mellanox Technologies

Comment Type **E** *Comment Status* **A** *extra space*

leading space before: is average

SuggestedRemedy

Remove

Response *Response Status* **C**

ACCEPT.

Cl **151** *SC* **151.8.8** *P* **81** *L* **36** # R1-18

Dawe, Piers J G — Mellanox Technologies

Comment Type **E** *Comment Status* **A** *missing the*

is average

SuggestedRemedy

is the average? Also in 140.7.5c

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

- Change from "is average" to "is the average" on page 81, line 36.
- Change from "is average" to "is the average" on page 53, line 8.

Cl **151** *SC* **151.8.13** *P* **83** *L* **4** # R1-19

Dawe, Piers J G — Mellanox Technologies

Comment Type **E** *Comment Status* **A** *comma*

Misplaced comma

SuggestedRemedy

Change
400GBASE-LR4-6 if, measured using
to
400GBASE-LR4-6, if measured using

Response *Response Status* **C**

ACCEPT IN PRINCIPLE.

Delete comma.

Cl **151** *SC* **151.8.13** *P* **83** *L* **4** # R1-6

Nicholl, Gary — Cisco Systems, Inc.

Comment Type **E** *Comment Status* **A** *comma*

Missing comma after "122.8.9" in the first sentence of 151.8.13.

SuggestedRemedy

Add a comma after "122.8.9" in the first sentence of 151.8.13.

Response *Response Status* **C**

ACCEPT.

Cl **151** *SC* **151.13.4.5** *P* **92** *L* **40** # R1-20

Dawe, Piers J G — Mellanox Technologies

Comment Type **E** *Comment Status* **A** *reorder PICS*

Put the PICS in the same order as the transmitter table and optical parameters subclauses

SuggestedRemedy

Over/under-shoot and Transmitter power excursion should come after OM6 Over/under-shoot and before Extinction ratio, as OM7, OM8

Response *Response Status* **C**

ACCEPT.