

June 2 Meeting (updates to proposed responses):

Comment #28

PROPOSED ACCEPT IN PRINCIPLE.

The final responses to comments #32 and #33 partially address the suggested remedy from the commenter (hit ratio aspect of the measurement).

However in addition the commenter has highlighted an oversight in implementing the final response to comment #47 against D2.0

(http://www.ieee802.org/3/cu/comments/8023cu_D20_final_comment_responses_by_ID.pdf), and specifically that “Transmitter over/under-shoot” should be measured at both TP2 and TP3 in accordance with slide 6 of zivny_3cu_01_032420.

The following changes correct this oversight, and also address comments #20 and #25.

Change the second paragraph of 140.7.5b,

From:

“Transmitter over/under-shoot is measured using the TDECQ reference receiver (see 140.7.5) with the equalizer turned off.”

To:

“Transmitter over/under-shoot is measured using the waveform captured for the TDECQ test (see 140.7.5) and the waveform captured for the TECQ test (see 140.7.5a), but without the reference equalizer being applied in either case”.

Change the second paragraph of 140.7.5c,

From:

“Transmitter peak-to-peak power is the difference of the maximum observed power at any location of the unequalized waveform and the minimum observed power at any location of the unequalized waveform. It is measured using the TDECQ reference receiver (see 140.7.5), with the equalizer turned off..”

to:

“Transmitter peak-to-peak power is measured using the waveform captured for the TDECQ test (see 140.7.5) and the waveform captured for the TECQ test (see 140.7.5a), but without the reference equalizer being applied in either case”. Transmitter peak-to-peak power is the difference between Pmax and Pmin, with Pmax and Pmin defined in 140.7.5b

Change the second paragraph of 151.8.9,

From:

“Transmitter over/under-shoot is measured using the TDECQ reference receiver (see 151.8.5) with the equalizer turned off.”

To:

“Transmitter over/under-shoot is measured using the waveform captured for the TDECQ test

(see 151.8.5) and the waveform captured for the TECQ test (see 151.8.6), but without the reference equalizer being applied in either case”.

Change the second paragraph of 151.8.10,

From:

“Transmitter peak-to-peak power is the difference of the maximum observed power at any location of the unequalized waveform and the minimum observed power at any location of the unequalized waveform. It is measured using the TDECQ reference receiver (see 151.8.5), with the equalizer turned off..”

to:

“Transmitter peak-to-peak power is measured using the waveform captured for the TDECQ test (see 151.8.5) and the waveform captured for the TECQ test (see 151.8.10), but without the reference equalizer being applied in either case”. Transmitter peak-to-peak power is the difference between Pmax and Pmin, with Pmax and Pmin defined in 151.8.9.

Comment #31

PROPOSED REJECT

The measurement methodology and associated limits in D2.1 are based on measured data presented in rodes_3cu_01_032420 and associated presentations.

Changing the test methodology and limits would require supporting data. There is no consensus to make the proposed change.

Comment #29

PROPOSED REJECT

The measurement methodology and associated limits in D2.1 are based on measured data presented in rodes_3cu_01_032420 and associated presentations.

Changing the test methodology and limits would require supporting data. There is no consensus to make the proposed change.

Comment #9:

PROPOSED ACCEPT IN PRINCIPAL

Change “Transmitter peak-to-peak power (max)” for 100GBASE-LR1 in Table 140-6 from 5.8dBm to 5.5 dBm.

It is not clear that also changing “Outer Optical Modulation Amplitude (OMA_{outer}) (max)” is necessary to protect the receiver.

Comment #22:

PROPOSED ACCEPT IN PRINCIPAL

Based on the analysis captured in lewis_3cu_01_060220 make the following changes to the draft.

Table 140-6.

Change the Average launch power (min) for 100GBASE-FR1 from -2.9dBm to -3.1dbm

Table 140-7.

Change the Average receive power (min) for 100GBASE-FR1 from -6.9dBm to -7.1dBm

Section 140.10.1a:

Change:

"The 100GBASE-FR1 and 100GBASE-DR PMDs can interoperate with each other provided that the fiber optic cabling (channel) characteristics for 100GBASE-DR (see 140.10 and Table 140–12) are met"

to:

"The 100GBASE-FR1 and 100GBASE-DR PMDs can interoperate with each other provided that the fiber optic cabling (channel) characteristics for 100GBASE-DR (see 140.10 and Table 140–12) are met and the 100GBASE-FR1 transmitter average power is greater than or equal to the value for average launch power (min) for 100GBASE-DR in Table 140-6."

Table 140-15 “Channel insertion loss requirements for interoperation between 100GBASE-LR1 and 100GBASE-DR”:

- For LR1 transmitter to DR receiver, change max loss from 4.1 to 4 dB
- For DR transmitter to LR1 receiver, change max loss from 4.8 to 5.2 dB

Table 140-16 “Channel insertion loss requirements for interoperation between 100GBASE-LR1 and 100GBASE-FR1”:

- For LR1 transmitter to FR1 receiver, no change
- For FR1 transmitter to LR1 receiver, change max loss from 5.6 to 5.1 dB

Table 151-16 “Channel insertion loss requirements for interoperation between 400GBASE-LR4-6 and 400GBASE-FR4”:

- For LR4-6 transmitter to FR4 receiver, no change
- For FR4 transmitter to LR4-6 receiver, change max loss from 6.1 to 5.8 dB

[Editors note - not to be included in the comment response - Based on the changes listed above the Average receive power (min) for 100GBASE-FR1 is changed from -6.9dBm to -7.1dBm, and this is sufficient for interop between a 100GBASE-LR1 transmitter with an Average launch power (min) of -1.9 dBm (changed by comment #8) and a 100GBASE-FR1 receiver, with a maximum loss of 5.2dB per section 140.10a.3.]

Comment #23:

PROPOSED ACCEPT IN PRINCIPAL

See comment #22.

Comment #24:

PROPOSED ACCEPT IN PRINCIPAL

See comment #22.

Note , based on the proposed response to comment #28 above, we need to reopen comments #20 and #25 and update the responses as follows:

Comment #20:

PROPOSED ACCEPT IN PRINCIPAL

See comment #28

Comment #25:

PROPOSED ACCEPT IN PRINCIPAL

See comment #28

.

