Cl **68** *SC* *P* **19** *L* **2** # **108**

George, John

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

In table 68-3 footnote e must be clarified to minimize link failures by encouraging the use of the "best" launch.

Suggested Remedy

SuggestedRemedy: In footnote e, replace the first sentence "The default launches are the preferred launches" WITH "The preferred launch must be used at each end of the link on the initial attempt to operate the link, to minimize the probability of link failure. If the link fails using the preferred launch, the alternative launch on one or both ends of the link may enable a functional link."

Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

The preferred launch is expected to have the highest probability of link success. However, if the link fails using the preferred launch, use of the alternative launch increases the overall probability of achieving a functional link.

Yes: 16
No: 13

The preferred launch is expected to have the highest probability of link success for worst-case channels. However, if the link fails using the preferred launch, use of the alternative launch increases the overall probability of achieving a functional link.

Yes: 10
No: 17

Reject.
User guidance is not appropriate within transmitter spec table.
The name "preferred launch" has been adopted in comment 107.

Yes: 23
No: 10

No Consensus reached.

Cl **68** *SC* **6.8** *P* **18** *L* **17** # **117**

Dudek, Mike Picolight

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

Table 68-3 What matters to the Receiver is the signal to noise ratio of the equalized signal (plus a maximum amount of distortion to equalize). The measurement of TWDP becomes imprecise with different shaped Tx outputs due to the difficulty in defining OMA. It would be better to specify these quantities in the way that matters to the receiver and so that inaccuracies in the OMA definition cancel out. Also if parts have low TWDP there is no need to have as large an OMA or average output power.

Suggested Remedy

Change ""Launch power in OMA min"" value to ""-9.5dBm + TWDP"". Reduce Average Launch Power min to -7.5dBm.

Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.
Also:

Change min OMA to -5.5dBm

Change Figure 68-5 complaint region to -7.5dBm ave power
New label on min OMA vertical dashed line "for case of TWDP of 5.1 dB"

No consensus reached.

Cl **68** *SC* **68.2** *P* **14** *L* **4** # **458**

Swenson, Norman

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

Unlike other optical PMDs, LRM is signal processing intensive, and should allow more latency to widen the implementation space available to vendors. The suggested remedy increases the total delay limit for the combined PCS, PMA and PMD from roughly .4 microseconds to roughly 1 microsecond (from 4096 bit times to 10240 bit times).

Suggested Remedy

Change text of Clause 68.2 from “not more than 512 bit times, or 1 pause_quanta” to “not more than 6656 bit times, or 13 pause_quanta”. This will also require addition of a row for LRM in Table 44-2 as follows: Sublayer: LRM; Maximum (bit time): 6656; Maximum (pause_quanta): 13; Notes: Includes 2 meters of fiber. See 68.2.

Response *Response Status* **W**

This comment remains unresolved.

Cl **68** *SC* **68.5.2** *P* **19** *L* **31** # **196**

Dawe, Piers Agilent

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

These 'ISI parameters' are wrong. Parameters must be chosen with regard to the project's priorities of cost, heat, size and timescale. Also, we need to be sure that the _combination_ of pulse spreading and noise loading is acceptable for 2005-vintage equalising receivers, so at time of writing I can't sign off even my best guess.

Suggested Remedy

My best guess parameters are:
0.168 0.188 0.527 0.117,
0.000 0.513 0.000 0.487,
0.254 0.453 0.155 0.138.

Response *Response Status* **W**

Motion

Reject.
Stressors will not adequately support robust 10GBASE-LRM to the 300m distance.
Moved: John George
Seconded: John Abbott

Motion to call question:
For: 21
Agaist: 3

For: 13
Against: 19
Abstain: 7

Motion

Reject

Lack of consensus that the stressors will adequately support 10GBASE-LRM over 300m.

Moved: John Abbott

Failed - No seconder.

Motion

Accept in priciple.
Stressor values to be as given in suggested remedy.

Moved: Steve Swanson
Seconder: Paul Kolesar

For: 19
Against: 13
Abstain: 8

This comment remains unresolved at 9.30am Thursday 16th June 2005.

Cl **68** *SC* **68.5.2** *P* **19** *L* **31** # **201**

Weiner, Nick Phyworks

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

Receiver test parameter values in Draft 2.0 were suggested in before our current method for deriving the values was developed. We now have values that have been carfully derived, considering real world implementation factors, to facilitate rapid introduction of low cost, low power 10GBASE-LRM implementations. Together with the other 10GBASE-LRM compliance tests, the resulting receiver test will ensure robust performance of 10GBASE-LRM in the field.

Suggested Remedy

Pre-cursor values: 0.168 0.188 0.527 0.117
Symmetrical values: 0.000 0.513 0.000 0.487
Post-cursor values: 0.254 0.453 0.155 0.138

Response *Response Status* **W**

This comment remains unresolved at 10am Thur 16th June 2005
See responses to comment 196 and 401.

Cl **68** *SC* **68.6** *P* **19** *L* **31** # **219**

Telang, Vivek Broadcom Corp

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

The values of the Precursor ISI parameters in the comprehensive stressed receiver tests have been shown to be not optimal (see John Ewen's presentation http://grouper.ieee.org/groups/802/3/aq/public/mar05/ewen_1_0305.pdf)

Suggested Remedy

Replace with the values from Row 23 of the Precursor worksheet from the spreadsheet ""Candidate TP3 Response Rev00.xls"" submitted by John Ewen to the reflector on 4/7/05. http://grouper.ieee.org/groups/802/3/10GMMFSG/email/xls00003.xls The parameters are: 0.354 0.038 0.412 0.196, separated by 0.75 UI

Response *Response Status* **W**

This comment remains unresolved at 10am Thur 16th June 2005
See responses to comment 196 and 401.

Cl **68** *SC* **68.6** *P* **19** *L* **33** # **220**

Telang, Vivek — Broadcom Corp

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

The values of the Symmetrical ISI parameters in the comprehensive stressed receiver tests have been shown to be not optimal (see John Ewen's presentation http://grouper.ieee.org/groups/802/3/aq/public/mar05/ewen_1_0305.pdf)

Suggested Remedy

Use the values from Row 22 of the Split-Symmetric worksheet from the spreadsheet ""Candidate TP3 Response Rev00.xls"" submitted by John Ewen to the reflector on 4/7/05: http://grouper.ieee.org/groups/802/3/10GMMFSG/email/xls00003.xls The parameters are: 0.086 0.387 0.096 0.430, separated by 0.75 UI

Response *Response Status* **W**

This comment remains unresolved at 10am Thur 16th June 2005
See responses to comment 196 and 401.

Cl **68** *SC* **68.6** *P* **19** *L* **35** # **221**

Telang, Vivek — Broadcom Corp

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

The values of the Postcursor ISI parameters in the comprehensive stressed receiver tests have been shown to be not optimal (see John Ewen's presentation http://grouper.ieee.org/groups/802/3/aq/public/mar05/ewen_1_0305.pdf)

Suggested Remedy

Use the values from Row 20 of the Postcursor worksheet from the spreadsheet ""Candidate TP3 Response Rev00.xls"" submitted by John Ewen to the reflector on 4/7/05: http://grouper.ieee.org/groups/802/3/10GMMFSG/email/xls00003.xls The parameters are: 0.256 0.397 0.110 0.237, separated by 0.75 UI

Response *Response Status* **W**

This comment remains unresolved at 10am Thur 16th June 2005
See responses to comment 196 and 401.

Cl **68** *SC* **68.6.9.3** *P* **29** *L* **46** # **358**

Lindsay, Tom — ClariPhy Communicati

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

The current text says that calibration should be done without the ISI generator. The note above Figure 68-10 says that other implementation options for pulse shaping are allowed, so that a block named ISI generator might not even be used. We need a calibration procedure that is not dependent on the implementation that is shown.

Suggested Remedy

Change the text to ""The extinction ratio of the optical output test signal is intended to represent the extinction ratio of a minimally compliant transmitter, where eye closure causes the extinction ratio to be lower than what would be determined by a ratio of the two levels used to determine OMA. The extinction ratio can be calibrated with the same square wave signal used to calibrate OMA of the test signal, but to account for the eye closure, the target value for extinction ratio should be 4.3 dB with the square wave pattern.""

Response *Response Status* **W**

PROPOSED REJECT.
Users are expected to understand that this is an option, without text to explain it.
For: 11
Against: 5

Accept in principle:
Add text to sentence:
Alternatively, the extinction ratio can be calibrated with the same square wave signal used to calibrate OMA of the test signal, but to account for the eye closure, the target value for extinction ratio should be 4.3 Db with the square wave pattern.
For:8
Against: 7

No consensus reached.

Cl **68** *SC* **Table 68-4** *P* **19** *L* **31** # **401**

Bhoja, Sudeep — Big Bear Networks

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

The Pre-cursor, Symmetrical & Post-cursor ISI parameter values need updating. These numbers predated the inclusion of the composite launch and hence exceed the 99th percentile PIE-D value of 4.5dB based on Gen67YY fiber model with 2 connectors. In the weekly TP3 calls, we agreed without dissent that the TP3 stressors will be chosen from the set provided by John Ewen and presented in the following message on the reflector: <<http://www.ieee802.org/3/10GMMFSG/email/msg00767.html>> Propose using pre-cursor #23, Symmetrical row #22 and Post-cursor row #20 which corresponds to approx PIE-D target of 4.5dB

Suggested Remedy

Replace the values as specified below:
Pre-cursor{A1, A2, A3, A4} = {0.354 0.038 0.412 0.196}
Symmetrical{A1, A2, A3, A4} = {0.086 0.387 0.096 0.430}
Post-cursor{A1, A2, A3, A4} = {0.256 0.397 0.110 0.237}

Response *Response Status* **W**

Motion to accept.
Moved by Steve Swanson
Seconded by Paul Kolesar

For: 7
Against: 19
Abstain: 11

Motion

Reject

No consensus within Task Force to accep

Moved: Mike Dudek
Seconded: Petre Popescu

For: 19
Against: 12
Abstain:10

Fails

This comment remains unresolved at 10am Thurdsay 16th June 2005.

Cl **68** *SC* **Table 68-4** *P* **19** *L* **32** # **402**

Lindsay, Tom — ClariPhy Communicati

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

Stressors need to be updated. Stress levels should represent the coverage levels that 802.3 is accustomed to.

Suggested Remedy

For pre-cursor, symmetrical, and post-cursor, cases respectively, change to 0.354 0.038 0.412 0.196 0.086 0.387 0.096 0.430 0.256 0.397 0.110 0.237 These represent PIE-Ds of just over 4.5 dB when convolved with the 47.1 psec Gaussian waveshape. They are from John Ewen's tables. Figure 68-12 and Table 68-6 will also need to be updated to reflect the new responses. I have not created a tool to do this, but others have.

Response *Response Status* **W**

This comment remains unresolved at 10am Thur 16th June 2005
See responses to comment 196 and 401.

Comments 201, 219, 220, 221, 402 unresolved.
This agreed by Task Force without opposition.

Cl **68A** *SC* **6** *P* **18** *L* **31** # **413**

Ghiasi, Ali — Broadcom

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

Uncorrrelated jitter value of 0.033 RMS is too high and puts unreasonable penalty. Reduce 0.033 UI to 0.023. You also need to define what uncorrelated jitter is or provide a reference.

Suggested Remedy

Response *Response Status* **W**

PROPOSED REJECT.

Propose reject: (Tuesday 14 June 2005)
Value: Value in Draft 2.0 has been discussed in detail by the Task Force.
Definition: Defined by means of the measurement method.
Yes: 8
No: 7

Propose reject: (Thursday 16 June 2005)
Value: Task Force has reconsidered the value in Draft 2.0 and does not see need to change.
Definition: Defined by means of the measurement method.
Yes: 13
No:5
Fails.

Comment remains unresolved.