Cl **141** *SC* **141.1.2** *P* **56** *L* **1** # 122

Remein, Duane Futurewei Technologies, Inc.

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

In Fig 141-1 (and the other similar figures in 142, 143, & 144) all show two 25GMII interfaces but never indicate use of the XGMII.

SuggestedRemedy

For each of the four figures in 2 places, adjacent to the right of OLT and ONU 25GMII, add "Note 1". Below the graphic and above the key add the following: "Note 1: in some instances of Nx25-EPON one-half of an XGMII (transmit or receive) may be paired with a complementary half (receive or transmit) of a 25GMII to provide a 25Gb/s downstream and 10Gb/s upstream interface."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

This is true only for channel 0 interface. It is better to add two lettered footnotes:
a) (attached to the first 25GMII interface) - as suggested by commenter
b) (attached to the second 25GMII interface) - "This interface may be absent in devices that do not support 50G-EPON PMDs."

Cl **141** *SC* **141.1.2** *P* **56** *L* **1** # 17

Hajduczenia, Marek Charter Communications

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

Figure 141–1 shows Nx25G-EPON and not EPON.

SuggestedRemedy

Change "EPON" to "Nx25G-EPON" in caption.
Also, we need to show XGMII in there as an option for OLT and ONU, since we also support asymmetric mode of operation with 10Gbps dat arate

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change "EPON" to "Nx25G-EPON" in caption.

See comment #122 for XGMII-related changes.

Cl **141** *SC* **141.1.3** *P* **55** *L* **31** # 356

Dudek, Mike Marvell

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

Other than it saying DW0 +DW1 for the 50G link in table 141-7 and there being two wavelengths listed in table 141-3 etc. it is not obvious that wdm is being used for 50G.

SuggestedRemedy

Add a sentence at the end of the paragraph (at line 31). "Links supporting 50Gb/s use wavelength division multiplexing on two wavelengths and hence two wavelengths are listed for these links.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Use the following text with terminology alignment:

"Nx25G-EPON PHY Link Types supporting 50 Gb/s use wavelength division multiplexing on two wavelengths; two wavelengths are listed for these links in Table 141–1 through Table 141–5."

Cl **141** *SC* **141.1.3** *P* **55** *L* **38** # 285

Wienckowski, Natalie General Motors

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

Missing non-breaking spaces in number that have 4 or more digits to the right of the decimal per 13.3.2 of the 2014 IEEE-SA Style Manual.

SuggestedRemedy

Change: 25.78125
To: 25.781 25

Proposed Response *Response Status* **Z**

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

Cl **141** *SC* **141.1.3** *P* **55** *L* **39** # 286

Wienckowski, Natalie General Motors

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

Missing non-breaking spaces in number that have 4 or more digits to the right of the decimal per 13.3.2 of the 2014 IEEE-SA Style Manual.

SuggestedRemedy

Change: 10.3125
To: 10.312 5

Proposed Response *Response Status* **Z**

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

Cl **141** *SC* **141.1.3** *P* **57** *L* **8** # 287

Wienckowski, Natalie General Motors

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

Missing non-breaking spaces in number that have 4 or more digits to the right of the decimal per 13.3.2 of the 2014 IEEE-SA Style Manual.

SuggestedRemedy

Change: 25.78125
To: 25.781 25
Also on P57 L9, P57 L 24, P57 L40, P57 L41, P58 L 6, P58 L7, P66 L11, P67 L13, P71 L11, P72 L13, P73 L18, & P74 L14.

Proposed Response *Response Status* **Z**

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

Cl **141** *SC* **141.1.3** *P* **57** *L* **25** # 288

Wienckowski, Natalie General Motors

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

Missing non-breaking spaces in number that have 4 or more digits to the right of the decimal per 13.3.2 of the 2014 IEEE-SA Style Manual.

SuggestedRemedy

Change: 10.3125
To: 10.312 5

Proposed Response *Response Status* **Z**

PROPOSED REJECT.

This comment was WITHDRAWN by the commenter.

Cl **141** *SC* **141.2.5** *P* **58** *L* **50** # 402

Dawe, Piers Mellanox

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

Will these work over less than 1:16 and/or less than 20 km? As stated, it's all about overload. But that contradicts "<= x dB".

SuggestedRemedy

Rephrase "at least".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Delete the “at least” statements for both power budgets.

Cl **141** *SC* **141.2.6** *P* **59** *L* **17** # 406

Dawe, Piers Mellanox

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

"rate class (in Gb/s)", "PMDs operate at Gigabit rates"

SuggestedRemedy

Gigabit -> gigabit/s. But actually, G is a multiplier for r1/r2

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Strike entries for G and BASE, since they do not need to be explained at all at this time.

Cl **141** *SC* **141.2.6** *P* **59** *L* **18** # 405

Dawe, Piers Mellanox

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

Optical PMDs don't use a baseband signal! 1.2.3 says only "The modulation type (e.g., BASE) indicates how encoded data is transmitted on the medium".

SuggestedRemedy

So far, optical PMDs all have BASE in their name (so in effect, it just signifies Ethernet) and all use "intensity modulation". However, P802.3ct may call coherent PMDs "BASE" too. This cell could be left blank.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Strike entries for G and BASE, since they do not need to be explained at all at this time.

Cl **141** *SC* **141.2.7** *P* **59** *L* **29** # 407

Dawe, Piers Mellanox

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

"a power budget is a characteristic of a link"

SuggestedRemedy

No, attenuation or "insertion loss" is a characteristic of the link. A power budget is a characteristic of a pair of PMD types, of a link type, or of a class of links.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change

"a power budget is a characteristic of a link"

to

"a power budget is a characteristic of a link type"

Cl **141** *SC* **141.2.7** *P* **59** *L* **29** # 408

Dawe, Piers Mellanox

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

paired PMDs transmitter launch power and receiver sensitivity

SuggestedRemedy

paired PMD's transmitter launch powers and receiver sensitivities

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change to "paired PMDs' transmitter launch powers and receiver sensitivities"

Cl **141** *SC* **141.2.7** *P* **59** *L* **33** # 410

Dawe, Piers Mellanox

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

Aside from the notes about "same coexistence mode, either X or G": If one is not interested in coexistence, (or even if one is), in what circumstances can a G connect to another G, or to an X?

SuggestedRemedy

Spell it out clearly

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Add a new sentence on page 59, line 34 (end of existing para): "Connection between G and X coexistence type PMDs is not supported, e.g., 25/10GBASE-PQG-D2 OLT PMD is not interoperable with 25/10GBASE-PQX-U2 due to non-overlapping OLT receiver sensitivity window and ONU transmitter channel range."

Cl **141** *SC* **141.2.7.1** *P* **60** *L* **19** # 21

Hajduczenia, Marek Charter Communications

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

"Table 141–8 illustrates recommended pairings …" - it implies these are just recommendations and other pairings are possible

SuggestedRemedy

Strike "recommended"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.2.7.1** *P* **60** *L* **41** # 22

Hajduczenia, Marek Charter Communications

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

Subclause 141.2.3 refers to coexistence options as coexistence classes and not coexistence modes

SuggestedRemedy

Change "support the same coexistence mode" to "support the same coexistence class"
The same change on Page 61, like 25

Proposed Response *Response Status* **W**

PROPOSED REJECT.

“support the same coexistence class” is wrong. They either support the same coexistence mode, or they belong to the same coexistence class.

Cl **141** *SC* **141.3.1.1** *P* **61** *L* **50** # 411

Dawe, Piers Mellanox

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

EQT?

SuggestedRemedy

As this is its first apperance, explain, e.g. with a cross-reference

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Insert cross reference to 1.4.245b

Cl **141** *SC* **141.3.1.2** *P* **62** *L* **1** # 413

Dawe, Piers Mellanox

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

80.3.3.1 has "The IS_UNITDATA_i.request (where i = 0 to n – 1) primitive is used..." Why does this use [ ] notation for what seems to be an equivalent thing?

SuggestedRemedy

Be consistent. Explain what i is.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Insert "(where i = 0 or 1)", after:
- PMD_UNITDATA[i].request(tx_bit), page 62, line 5
- PMD_UNITDATA[i].indication(rx_bit), page 62, line 18
- PMD_SIGNAL[i].request(tx_enable), page 62, line 31
- PMD_SIGNAL[i].indication(SIGNAL_DETECT), page 62, line 39

Add the statement: "For any indexed test point (e.g., TP1[i]), [i] indicates the channel index, where i = 0 or 1." at the end of para on page 62, line 52.

Cl **141** *SC* **141.3.1.2** *P* **62** *L* **8** # 412

Dawe, Piers Mellanox

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

signaling speed

SuggestedRemedy

signaling rate

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Change all instances

Cl **141** *SC* **141.3.3** *P* **64** *L* **2** # 414

Dawe, Piers Mellanox

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

As there are three levels

SuggestedRemedy

Change "higher" to "highest"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.3.3** *P* **64** *L* **2** # 355

Dudek, Mike Marvell

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

I could not find which bits are allocated to DW1 and which to DW0. I would have expected that information to be in 141.3.3 and 141.3.4. Does it matter? (I suspect it does).

SuggestedRemedy

Add the extra information or state explicitly that it doesn't matter.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

The PMD transmitter does not stripe the bits it receives from a single electrical interface into multiple wavelength. Instead, the receiver has independent electrical interfaces for each channel and maps each channel to a corresponding wavelength. The assignment of bits to separate channels happens in the MCRS.

Cl **141** *SC* **141.3.6** *P* **64** *L* **45** # 415

Dawe, Piers Mellanox

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

Just saying "it's defined" isn't enough.

SuggestedRemedy

Define it (at a superficial level), or refer to somewhere that does.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

No specific text has been proposed.

Cl **141** *SC* **141.5.1** *P* **66** *L* **27** # 416

Dawe, Piers Mellanox

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

An extinction ratio minimum of 8 dB sounds like an unhelpful constraint, which may force implementers to set up at worse TDP than they could have done.

SuggestedRemedy

Relax the extinction ratio minimum, add another OMA-TDP class at line 24 as necessary. This will cost the receiver nothing and widen the implementation options for the transmitter. Adjust note b from "at minimum extinction ratio" to "at 8 dB extinction ratio".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.5.1** *P* **66** *L* **34** # 417

Dawe, Piers Mellanox

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

10GBASE-SR: BER 1e-12, TDP max 3.9, mask {0.25, 0.40, 0.45, 0.25, 0.28, 0.40} ("no hits") or
{0.235, 0.395, 0.45, 0.235, 0.265, 0.4} at 5e10-5 hits/sample
40GBASE-SR4: BER 1e-12, TDP max 3.5, mask {0.23, 0.34, 0.43, 0.27, 0.35, 0.4} at 5e10-5 hits/ sample
25GBASE-SR: BER 5e10-5, TDEC max 4.3 dB, mask {0.3, 0.38, 0.45, 0.35, 0.41, 0.5} at 1.5e-3 hits/sample. KR FEC
25GBASE-LR, ER: BER 5e10-5, TDP max 2.7 dB, {0.31, 0.4, 0.45, 0.34, 0.38, 0.4} at 5e-5 hits/sample. KR FEC
This draft OLT: BER 1e-2, TDP max 1.5 dB, {0.25, 0.4, 0.45, 0.25, 0.28, 0.4} at 5e-5 hits/sample. QC-LDPC FEC
ONU BER 1e-2, TDP max 2 dB, mask coordinates as 25GBASE-LR, ER. QC-LDPC FEC

SuggestedRemedy

So we need a new mask hit ratio, somewhere near 1e-2, and should review the mask coordinates when that is known.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

No specific new mask hit ratio was proposed.

Cl **141** *SC* **141.5.1** *P* **66** *L* **35** # 23

Hajduczenia, Marek Charter Communications

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

"the OMA (min) must exceed this value" - sounds like it is intended to be a hard requirement? If that is the case, it shoul dbe converted into a "shall" statement and PICS updated accordingly

SuggestedRemedy

Per comment. The same comment applies to page 67, like 35; page 71, line 46, and page 72, line 42

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Convert statement into a "shall" statement and add PICS accordingly.

Cl **141** *SC* **141.5.2** *P* **68** *L* **3** # 126

Remein, Duane Futurewei Technologies, Inc.

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

50/25GBASE-PQG-D2 and 50/25GBASE-PQX-D2 appear in Table 141-15 twice, once with a single receive wavelength and once with two.

The same issues exists in Tables 141-16, 141-17 & 141-18.

SuggestedRemedy

Remove the 2nd instance (indicating 2 center wavelengths) of both.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.5.2** *P* **68** *L* **32** # 418

Dawe, Piers Mellanox

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

If these PMDs use FEC, probably the stressed receive signal should be defined by SEC, J2 and J4, as 25GBASE-SR, LR and ER, rather than VECP, J2 and J9 as 40GBASE-SR4.

SuggestedRemedy

But as the pre-BER is 1e-2, even J4 is wrong. Maybe Jrms and J3 would be suitable. SEC can easily be defined for a BER of 1e-2.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

No specific value was proposed

Cl **141** *SC* **141.5.2** *P* **68** *L* **35** # 439

Powell, William Nokia

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

Tables 141–15: In addition to “Vertical eye closure penalty”, footnote (f) should also apply to “Stressed eye J2 Jitter” and “Stressed eye J9 Jitter” since it refers to all 3 parameters, and to make it consistent with footnote (e) in Table 141-19.

SuggestedRemedy

Apply footnote (f) to “Stressed eye J2 Jitter” and “Stressed eye J9 Jitter” in Table 141-15.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.5.2** *P* **68** *L* **37** # 310

Lynskey, Eric Broadcom

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

Table 141-15 references Table 75-6, which does not contain two entries for stressed eye jitter.

SuggestedRemedy

Mark this cell as not applicable.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.5.2** *P* **69** *L* **20** # 308

Lynskey, Eric Broadcom

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

Table 141-16 references Table 75-6, which does not contain an entry for Average receive power (min).

SuggestedRemedy

Mark this cell as not applicable.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.5.2** *P* **69** *L* **20** # 437

Powell, William Nokia

Comment Type **TR** *Comment Status* **D** *Average receive power*

Table 141-16 has an entry for Average receive power, each channel (min) while it's medium power class cousin, Table 141-15, does not, which is not consistent. That entry should be removed per the rationale in comment #279 on D1.1 (John Johnson): "The inclusion of an informative spec on minimum average receive power doesn't serve any purpose to specify a compliant RX. An RX that meets the requirements of maximum receiver sensitivity (OMA) and maximum stressed receiver sensitivity (OMA) is compliant, even for very low values of AVP associated with very high ER signals."

SuggestedRemedy

Remove Average receive power, each channel (min) from Table 141-16.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #446

Cl **141** *SC* **141.5.2** *P* **69** *L* **20** # 446

Johnson, John Broadcom

Comment Type **T** *Comment Status* **D** *Average receive power*

The inclusion of an informative spec on minimum average receive power doesn't serve any purpose to specify a compliant RX. An RX that meets the requirements of maximum receiver sensitivity (OMA) and maximum stressed receiver sensitivity (OMA) is compliant, even for very low values of AVP associated with very high ER signals. This line should be removed from Table 141-16. (This repeats a comment originally submitted against D1.1)

SuggestedRemedy

Delete the line for "Average receive power, each channel (min)" in Table 141-16 and remove associated footnote (d).

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.5.2** *P* **69** *L* **37** # 441

Powell, William Nokia

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

Table 141–16: In addition to “Vertical eye closure penalty”, footnote (g) should also apply to “Stressed eye J2 Jitter” and “Stressed eye J9 Jitter” since it refers to all 3 parameters, and to make it consistent with Table 141-19.

SuggestedRemedy

Apply footnote (g) to “Stressed eye J2 Jitter” and “Stressed eye J9 Jitter” in Table 141-16.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.5.2** *P* **69** *L* **38** # 309

Lynskey, Eric Broadcom

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

Table 141-16 references Table 75-6, which does not contain two entries for stressed eye jitter.

SuggestedRemedy

Mark this cell as not applicable.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.6** *P* **70** *L* **7** # 127

Remein, Duane Futurewei Technologies, Inc.

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

Table 141-21 does not list media types as asserted in the following "A PQ compliant transceiver operates over the media types listed in Table 141–21 according to the specifications described in 141.9".
We could restructure the table similar to Table 75-14 or change the statement.

SuggestedRemedy

Change:
"media types listed in" to
"media meeting the dispersion shown in"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Comment type was changed to "T".

Cl **141** *SC* **141.6.2** *P* **73** *L* **39** # 25

Hajduczenia, Marek Charter Communications

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

Explicit "shall" statement with no paired PICS

SuggestedRemedy

Given that the table is normative as is, if this statement needs to be normative on its own, it needs to be added extra into PICS independently. Given that the same statement exists for each OLT and ONU receiver type, we could either add a new statement to 141.10.4.1 (FN13) or add a new statement into each and every PICS subclause for every PMD type (141.10.4.2 onwards). My preference is on the first approach

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Add a new statement to 141.10.4.1 (FN13) to cover this PICS

Cl **141** *SC* **141.6.2** *P* **74** *L* **19** # 447

Johnson, John Broadcom

Comment Type **T** *Comment Status* **D** *Average receive power*

The inclusion of an informative spec on minimum average receive power doesn't serve any purpose to specify a compliant RX. An RX that meets the requirements of maximum receiver sensitivity (OMA) and maximum stressed receiver sensitivity (OMA) is compliant, even for very low values of AVP associated with very high ER signals. This line should be removed from Table 141-20. (This repeats a comment originally submitted against D1.1)

SuggestedRemedy

Delete the line for "Average receive power, each channel (min)" in Table 141-20.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.6.2** *P* **74** *L* **19** # 438

Powell, William Nokia

Comment Type **TR** *Comment Status* **D** *Average receive power*

Table 141-20 has an entry for Average receive power, each channel (min) while it's medium power class cousin, Table 141-19, does not, which is not consistent. That entry should be removed per the rationale in comment #283 on D1.1 (John Johnson): "The inclusion of an informative spec on minimum average receive power doesn't serve any purpose to specify a compliant RX. An RX that meets the requirements of maximum receiver sensitivity (OMA) and maximum stressed receiver sensitivity (OMA) is compliant, even for very low values of AVP associated with very high ER signals."

SuggestedRemedy

Remove Average receive power, each channel (min) from Table 141-20.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

See comment #447

Cl **141** *SC* **141.6.2** *P* **74** *L* **30** # 440

Powell, William Nokia

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

Tables 141–20: In addition to “Vertical eye closure penalty”, footnote (f) should also apply to “Stressed eye J2 Jitter” and “Stressed eye J9 Jitter” since it refers to all 3 parameters, and to make it consistent with footnote (e) in Table 141-19.

SuggestedRemedy

Apply footnote (f) to “Stressed eye J2 Jitter” and “Stressed eye J9 Jitter” in Table 141-20.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.7** *P* **75** *L* **4** # 24

Hajduczenia, Marek Charter Communications

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

SuggestedRemedy

Proposed Response *Response Status* **W**

PROPOSED REJECT.

No comment body

Cl **141** *SC* **141.7.1** *P* **75** *L* **11** # 56

Kolesar, Paul CommScope

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

Suboptimal and possibly conflicting reference for insertion loss testing. The ITU reference is mostly for measurements in a factory environment. The IEC reference in clause 141.9.1 is for installed cabling and more relevant to the qualification of cable plant in the field.

SuggestedRemedy

Replace "A suitable test method is described in ITU–T G.650.1." with "Insertion loss measurements of installed fiber cables are made in accordance with IEC 61280–4–2."

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.7.2** *P* **75** *L* **18** # 128

Remein, Duane Futurewei Technologies, Inc.

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

We should note that Table 88-11 specifies "valid 100GBASE-R signal" in some instances.

SuggestedRemedy

Add to the end of the para "A valid 25G-EPON signal is substituted for the 100GBASE-R signal specified in Table 88-16."
Highlight Table 88-16 in forest green.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.7.4** *P* **75** *L* **31** # 419

Dawe, Piers Mellanox

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

ANSI/EIA-455-95 is not in the normative references but IEC 61280-1-1 is.

SuggestedRemedy

ANSI/EIA-455-95 to IEC 61280-1-1

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.7.5** *P* **75** *L* **36** # 57

Kolesar, Paul CommScope

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

Incorrect reference to test method. Digits appear transposed.

SuggestedRemedy

Replace 61820-2-2 with 61280-2-2.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.7.9** *P* **76** *L* # 421

Dawe, Piers Mellanox

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

141.7.9.1 reference Tx, 141.7.9.3 reference Rx and 141.7.9.4 (BER) don't apply to the 10G Tx in an ONU.

SuggestedRemedy

Add text to make this clear, as it is in 141.7.10, Receive sensitivity and 141.7.11, SRS.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Change "141.7.9 Transmitter and dispersion penalty (TDP)" to "141.7.9 Transmitter and dispersion penalty (TDP) for 25G"

Cl **141** *SC* **141.7.9** *P* **76** *L* **6** # 420

Dawe, Piers Mellanox

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

141.7.9 (TDP) references 88.8.5 but 88.8.5.4 says "as defined in 52.9.10.4 ...the BER of 1 x 10^-12". However, 141.7.9.4 says BER of 1 x 10^-2.

SuggestedRemedy

Change "with an optical channel that meets the requirements listed in 141.7.9.2" to "with the exceptions in 141.7.9.2 and 141.7.9.4".

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.7.9.2** *P* **76** *L* **22** # 97

Anslow, Pete Ciena

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

The equation for Dmin (Equation 141-1) is the minimum of three terms:
0
0.365*lambda*(1 - (1324/lambda)^4)
0.465*lambda*(1 - (1324/lambda)^4)
When lambda is greater than 1324 nm, the second and third terms are positive and Dmin is zero.
When lambda is less than 1324 nm, the second and third terms are negative and the third term is always more negative than the second term.
Consequently, the second term has no effect on the value of Dmin and should be deleted.
Likewise in the equation for Dmax (Equation 141-2) the second term has no effect on the value of Dmax and should be deleted.

SuggestedRemedy

In Equation (141-1) delete the second term 0.365*lambda*(1 - (1324/lambda)^4) leaving:
Dmin = min(0, 0.465*lambda*(1 - (1324/lambda)^4))

In Equation (141-2) delete the second term 0.365*lambda*(1 - (1300/lambda)^4) leaving:
Dmax = max(0, 0.465*lambda*(1 - (1300/lambda)^4))

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.7.10** *P* **76** *L* **47** # 130

Remein, Duane Futurewei Technologies, Inc.

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

Unwarranted Wild Goose Chase . Here -> 141.7.2 -> Table 88-11.
Also I don't think we define Rx sensitive for test patterns.

SuggestedRemedy

Change
"Receiver sensitivity is defined for test patterns in 75.7.3 (10G) and 141.7.2 (25G)." to
"The test patterns in 75.7.3 (10G) and Table 83-11 (25G) are use to test receiver sensitivity."
"75.7.3" & "Table 88-11" in forest green.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Comment type changed to "T"

After editorial fixes

Change
"Receiver sensitivity is defined for test patterns in 75.7.3 (10G) and 141.7.2 (25G)." to
"The test patterns in 75.7.3 (10G) and Table 83-11 (25G) are used to test receiver sensitivity."
"75.7.3" & "Table 88-11" in forest green.

Cl **141** *SC* **141.7.12** *P* **77** *L* **12** # 424

Dawe, Piers Mellanox

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

"When measuring jitter at TP1[i] and TP5[i]" do we give even recommendations for jitter at TP1[i] and TP5[i] in this clause?

SuggestedRemedy

Delete? Change to address the jitter measurements we do have (in SRS calibration)?

Proposed Response *Response Status* **W**

PROPOSED REJECT.

No specific value was proposed.

Cl **141** *SC* **141.7.12** *P* **77** *L* **12** # 423

Dawe, Piers Mellanox

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

Filtering out the low frequency jitter is a necessary part of the definition, it can't be left "recommended" or there is significant ambiguity.

SuggestedRemedy

Usually the same reference CRU as for several other definitions is invoked. This can be done by reference.
We may need to say more, e.g. references to the jitter metrics such as J2.

Proposed Response *Response Status* **W**

PROPOSED REJECT.

No specific value was proposed.

Cl **141** *SC* **141.7.13.1** *P* **78** *L* **7** # 425

Dawe, Piers Mellanox

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

Fig 141-3 does not show Toff correctly. 15% does not come into it.

SuggestedRemedy

It's simply the time to the average power of OFF transmitter in the relevant table.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Remove the 15% line.

Cl **141** *SC* **141.7.13.2** *P* **77** *L* **41** # 131

Remein, Duane Futurewei Technologies, Inc.

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

There is no TP4 in Figure 141-4: "the optical signal at TP3 to an electrical signal at TP4 ..."

SuggestedRemedy

Strike "at TP4"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.7.13.2** *P* **77** *L* **42** # 29

Hajduczenia, Marek Charter Communications

Comment Type **ER** *Comment Status* **D** *can-vs-may*

"can" used and not intended per Style Guide

SuggestedRemedy

Change "A scope, with a variable delay, can measure" to "A scope, with a variable delay, is able to measure"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.7.13.2** *P* **77** *L* **49** # 26

Hajduczenia, Marek Charter Communications

Comment Type **ER** *Comment Status* **D** *must-vs-shall*

"must" used and not intended per Style Guide

SuggestedRemedy

Change "Notice that only the steady state optical OFF power must be conformed" to "Notice that only the steady state optical OFF power is expected to be conformed"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.7.13.2** *P* **78** *L* **1** # 98

Anslow, Pete Ciena

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

Some of the figures in the draft are appropriately drawn. However, a number of the figures are inserted as bit maps.
This has several drawbacks: the rendition of the figures is poor making small text difficult to read, the use of bit maps increases the file size unnecessarily, the text content of the figures is not searchable and most importantly, including non-editable figures makes life difficult if changes are required in Maintenance after the figure has been incorporated into the next revision.

SuggestedRemedy

Go through the entire draft replacing figures that have been pasted as bit maps with versions that are drawn in FrameMaker.
If there are any figures illustrating equations, use a vector graphics (e.g. .svg format) and apply any text annotations in FrameMaker.
Example figures needing to be replaced are Figures 141-3, 142-2, 142-5, 142-6, 142-7, 142-8, 142-9, 142-13, 142-14, 142-15, 142-16, 142-18, 143-1, 143-2, 143-3, 143-4, 143-5, 143-6, 143-7, 143-8, 143-9, 143-12, 143-13, 143-15, 143-16, 144-3, 144-4, 144-5, 144-6, 144-7, 144-8, 144-9, 144-10, 144-11, 144-12, 144-13, 144-13, 144-14, 144-15, 144-16, 144-17, 144-18, 144-20, 144-21, 144-22, 144-23, 144-24, 144-25, 144-26, 144-27, 144-28, 144-29, 144-31, 144-32, 144-33, 144-34, 142A-1

Proposed Response *Response Status* **W**

PROPOSED ACCEPT IN PRINCIPLE.

Figures shall be replaced prior to IEEE SA ballot to avoid constant changes in Frame which is a not an optimum drawing tool - for now, it is easier to keep them in Visio

Cl **141** *SC* **141.7.14.2** *P* **79** *L* **49** # 27

Hajduczenia, Marek Charter Communications

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

"must" used and not intended per Style Guide

SuggestedRemedy

Change "time must be met in the following scenarios" to "time is expected to be met in the following scenarios"

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.

Cl **141** *SC* **141.9.1** *P* **81** *L* **10** # 55

Kolesar, Paul CommScope

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

Outdated reference to 61280-2-4:2000

SuggestedRemedy

This standard was revised in 2014. But the reference should be undated to always imply the latest revision. Remove ":2000" from the reference.

Proposed Response *Response Status* **W**

PROPOSED ACCEPT.