Proposed Resolutions to "shall be tested" comments from Lennart -

General approach – change these to the formula "When tested using the test fixture shown in Figure xxx-yyy and the transmitter in test mode z, the transmitter ..."

See proposed resolutions to comments 301, 302, 308, 309, 310 below:

C/146 SC 146.5.4.1 P 140 L 48 # 301

Comment Type TR

"Transmitter output voltage shall be tested using test mode 1 in combination with the test

fixture shown in Figure 146-17."

We can't put requirements on the tester, only on the device.

SuggestedRemedy

Rewrite the requirement:

"When tested with the test fixture shown in Figure 146-17 in test mode 1, the transmitter

output voltage shall ... <show some property>.'

Possibly the very next sentence already covers this. In that case, make the quoted

sentence informative.

PROPOSED ACCEPT IN PRINCIPLE.

Change "Transmitter output voltage shall be tested using test mode 1 in combination with the test

fixture shown in Figure 146-17. The transmitter output voltage shall be $2.4 \text{ V} \pm 5\%$ peak-to-peak (for the 2.4 Vpp operating mode) and $1.0 \text{ V} \pm 5\%$ peak-to-peak (for the 1.0 Vpp operating mode).

To: ""When tested with the test fixture shown in Figure 146-17 with the transmitter in test mode 1, the transmitter output voltage shall be $2.4 \text{ V} \pm 5\%$ peak-to-peak (for the 2.4 Vpp operating mode) and $1.0 \text{ V} \pm 5\%$ peak-to-peak (for the 1.0 Vpp operating mode)."

Comment Status **D**

Response Status W

C/146 SC 146.5.4.3 P 141 L 21 #302

Comment Type TR

"The transmitter symbol-to-symbol jitter shall be tested using test mode 1 in combination

with the test fixture shown in Figure 146-17."

We can't put requirements on the tester, only on the device.

SuggestedRemedy

Make sentence informative.

PROPOSED ACCEPT IN PRINCIPLE.

Change "The transmitter symbol-to-symbol jitter shall be tested using test mode 1 in combination

with the test fixture shown in Figure 146-17. The maximum jitter at..."

to "When tested using the test fixture shown in Figure 146-17 with the transmitter in test mode 1, the maximum jitter at ..."

Comment Status ${\bf D}$

Response Status W

C/147 SC 147.5.4.1.1 P 185 L 3 # 308

Comment Type TR

"Transmitter output voltage shall be tested using test mode 1 in combination with the test

fixture shown in Figure 147-12."

Puts a requirement on the test(er), rather than on the device.

SuggestedRemedy

Rewrite to put requirement on the PHY, or make informative.

PROPOSED ACCEPT IN PRINCIPLE.

Change "The transmitter output voltage shall be 1 V \pm 20% peak-to-peak differential. Transmitter output voltage shall be tested using test mode 1 in combination with the test

fixture shown in Figure 147-12."

To "When tested using the test fixture shown in Figure 147-12 with the transmitter in test mode 1, the transmitter output voltage shall be $1 \text{ V} \pm 20\%$ peak-to-peak differential."

C/147 SC 147.5.4.1.2 P 185 L 8 # 309

Comment Type TR

"Transmitter output droop shall be measured using test mode 2 and with the test fixture shown in Figure 147-12."

Puts a requirement on the test(er), rather than on the device.

SuggestedRemedy

Rewrite to put requirement on the PHY, or make informative.

PROPOSED ACCEPT IN PRINCIPLE.

Change "Transmitter output droop shall be measured using test mode 2 and with the test fixture shown in Figure

147–12. The magnitude of..." To

"When tested using the text fixture shown in Figure 147-12 with the transmitter in test mode 2, the magnitude of..."

C/147 SC 147.5.4.2 P 185 L 33 # 310

Comment Type TR

"The transmitter symbol-to-symbol jitter shall be tested using test mode 1 in combination with the test fixture shown in Figure 147-12. The maximum jitter at the transmitter side shall be less than +-5 ns symbol-to-symbol jitter."

Puts a requirement on the test(er), rather than on the device.

SuggestedRemedy

Rewrite to put requirement on the PHY, or make informative.

Does the requirement only hold when using this particular test?

Or is the test the only way to correctly observe?

PROPOSED ACCEPT IN PRINCIPLE.

Change ""The transmitter symbol-to-symbol jitter shall be tested using test mode 1 in combination with the test fixture shown in Figure 147-12. The maximum jitter at..."

To "When measured using the test fixture shown in Figure 147-12 with the transmitter in test mode 1, the maximum jitter at..."