

802.3cp D1.3 Bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs 4th Task Force review co

Cl 157 SC 1.4 P42 L9 # 115

Effenberger, Frank Futurewei Technologies

Comment Type T Comment Status X

The BR20 and BR40+ PMD's need the strong RS FEC that is specified in clause 108 (i.e., the same FEC used for 25G.

SuggestedRemedy

Modify table 157-2 to change the "FEC" clause referenced to 108. Make the entries for BR20 and BR40+ (four places) "M". The BR10 and BR40 entries can remain "O".

Proposed Response Response Status O

Cl 158 SC 1 P47 L20 # 116

Effenberger, Frank Futurewei Technologies

Comment Type T Comment Status X

The FEC reference in the table is not correct. Also, the PMDs are grouped incorrectly given the new FEC requirement

SuggestedRemedy

Reformat the table so that BR10 and BR40 are in column #2, and BR20 and BR40+ are in column #3. Change the bottom row to list clause "108 RS-FEC\*", Optional, and Required. Add a footnote:  
\* Clause 108 describes an FEC for 25 Gb/s PHY, but the same scheme can be applied to 10 Gb/s PHYs.

Proposed Response Response Status O

Cl 158 SC 6.1 P52 L1 # 117

Effenberger, Frank Futurewei Technologies

Comment Type T Comment Status X

The optical parameters for BR20 and BR40+ are very difficult to implement, due to the large link loss range. The use of APD receivers and RS-FEC makes these more practical.

SuggestedRemedy

Modify the following entries:  
BR20BR40+  
Av Power Max-5.6+4.0  
Av Power Min-12.0-4.0  
OMA-TDP Min-10.0-2.0  
OMA Min-9.0-1.0  
TDP Max2.02.6  
ER Min55

Proposed Response Response Status O

Cl 158 SC 6.2 P53 L1 # 118

Effenberger, Frank Futurewei Technologies

Comment Type T Comment Status X

We need to change the Rx levels to match the new Tx.

SuggestedRemedy

Modify the entries as noted:  
BR20BR40+  
Av Power Max-5.6-6.0  
Av Power Min-27.2-27.2  
Damage Power-4.6-5.0  
Sensitivity OMA-25.0-25.0  
Stressed OMA-22.7-22.7

Modify footnote (d) to read: Measured with a conformance test signal at TP3 (see 52.9.9.3) for BER = 10<sup>-12</sup> for BR10 and BR40, and for BER = 5\*10<sup>-5</sup> for BR20 and BR40+

Proposed Response Response Status O

Cl 159 SC 1 P 65 L 20 # 114

Effenberger, Frank Futurewei Technologies

Comment Type E Comment Status X

The table has 3 columns for 4 PHY types. This doesn't make sense.

*SuggestedRemedy*

Two remedies:

- 1) Make the table have two columns, and lump all 4 PHYs into one column.
- 2) Make the table have five columns, and give each PHY its own.

Proposed Response Response Status O