

### 114.6.3.4 Receiver corner tests

This subclause identifies corner test conditions to verify the receiver optical specifications defined in 114.6.3.3. A 1000BASE-RHx PHY shall be able to establish a reliable link as specified in 114.6.3.3 under corner conditions defined in 114.6.3.4.1 and 114.6.3.4.2.

#### 114.6.3.4.1 Receiver sensitivity corner test

This test is oriented to operate the 1000BASE-RHx PHY receiver in sensitivity conditions. Conditions of the transmitter and the receiver are defined Table 114–10a. For the purpose of this test, the responses of channel type I, type II, and type III are defined by the lower bound limits specified in Table 114–11, Table 114–12, and Table 114–13, respectively. Parameters of Table 114–9 and Table 114–10 not specified in Table 114–10a can take any value in the specification ranges.

**Table 114–10a—Parameters for receiver sensitivity corner test**

Parameter		Symbol	Units	Value/Criteria			
				RHA	RHB	RHC	
				Fiber optic channel			
				Type I	Type I	Type II	Type III
Transmitter	Extinction ratio	ER	dB	11			
	Fall time (90% – 10%)	t <sub>f</sub>	ns	3			
	Overshoot	OS	%	0			
Receiver	Receive average optical power	AOP	dBm	-17	-17	-17	-18.5

#### 114.6.3.4.2 Receiver saturation corner test

This test is oriented to operate a 1000BASE-RHx PHY receiver in saturation conditions. Conditions of the transmitter and the receiver are defined Table 114–10b. The local receiver under test is connected to the remote transmitter by means of plastic optical fiber consistent with specifications of 114.7 of at most 1 meter length. Parameters of Table 114–9 and Table 114–10 not specified in Table 114–10b can take any value in the specification ranges.

**Table 114–10b—Parameters for receiver saturation corner test**

Parameter		Symbol	Units	Value/Criteria		
				RHA	RHB	RHC
Transmitter	Extinction ratio	ER	dB	15		
Receiver	Receive average optical power	AOP	dBm	1		
	Receiver reflectance	RR <sup>a</sup>	dB	-14		

<sup>a</sup> See 1.4 for definition of reflectance.

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