IEEE802.3dj Modal ERL Implementation

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IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet Task Force

Modal Return Loss Overview

❑ Keep all frequency domain modal masks

❑ If modal masks for cable assembles, hosts, modules, KR channels, chip to chip channels, or MTF fail the respective modal RL mask, there is an opportunity to pass if modal ERL passes.

Additional Test Limit if Frequency Mask Fails

section	tx			rx			channel tx or rx		
	ERLcc	ERLdc	ERLcd	ERLcc	ERLdc	ERLcd	ERLcc	ERLdc	ERLcd
178.9.2 Transmitter characteristics									
178.9.3 Receiver characteristics									
178.10 Channel characteristics							2 dB	17 db	17 db
179.9.4 Transmitter characteristics (CR Host)	2 dB	17 db	17 db						
179.9.5 Receiver characteristics (CR Host)				2 dB	17 db	17 db			
179.11 Cable assembly characteristics							2 dB	17 db	17 db
176C.6.3 Transmitter characteristics									
176C.6.4 Receiver characteristics									
176C.7 Channel characteristics							2 dB	17 db	17 db
176D.6.4 Host output characteristics	2 dB	17 db	17 db						
176D.6.5 Module output characteristics	2 dB	17 db	17 db						
176D.6.6 Host input characteristics				2 dB	17 db	17 db			
176D.6.7 Module input characteristics				2 dB	17 db	17 db			
179D.4.3 MTF DC							2 dB	17 db	17 db
176D.4.4 MTF CC							2 dB	17 db	17 db

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Thank You!