



Test Results Tables

This appendix contains tables and checklists to use during the turn-up and test of a Cisco ONS 15540.

Table B-1 Test Results for Cisco ONS 15540 ESP

Test or Procedure	Expected Result (After Power-up)	Notes
Performing Fiber Plant Characterization on page 1-7	Tested fiber meets the specifications listed in that section.	
Installing Line Card Motherboards and Transponder Modules on page 2-7	The “Status” LED is green.	
Installing SM Transponder Modules or MM Transponder Modules on page 2-8	All LEDs on the module are off (default).	
Installing Extended Range Transponder Modules on page 2-9	All LEDs on the module are off (default).	
Cabling Mux/Demux Modules on page 2-10	Use a power meter to confirm that the top OSC port on the motherboard is Tx and the bottom is Rx. Conduct the check for slot 0 as well as slot 1.	
Verifying the Power Up on page 2-13	The Status LED is green. The Active LED on the primary processor and the Standby LED on the standby processor are both green. The alarm LEDs are off.	
Verifying Installation of Hardware on page 2-13	All modules in the chassis are reported in the proper slot by Cisco IOS software. The modules have the correct hardware version and software version.	
Configuring Patch Connections on page 3-8	Confirm that the interfaces are administratively up.	
Verifying Transmit Launch Power and Insertion Losses on page 4-2	Tx optical power and wavelengths are in line with figures in the power specification tables.	
Verifying Power Levels on the Client Interfaces on page 4-4	Measured power matches the specifications provided.	

Table B-1 Test Results for Cisco ONS 15540 ESP (continued)

Test or Procedure	Expected Result (After Power-up)	Notes
Verifying Laser Frequency on page 4-11	The laser frequency (channel number) is configured to the proper wavelength.	
Testing the Bit Error Rate on page 4-13	The test runs error free for 15 minutes.	
Checking Alarms on page 4-14	Alarms are generated for the listed fault conditions.	
Verifying a Meshed Ring Configuration on page 5-2	Expected results (from network design), measured results, and results as seen by Cisco IOS software match.	
Checking Connectivity between OSCs on page 5-4	Active is displayed under the Status field. 2way is displayed under the OSCP St. field.	
Checking Power with an OSA on page 5-5	Channel count, power, power equalization, and OSNR meet the network design requirements.	
Testing the Bit Error Rate on page 5-6	The test runs error free for 15 minutes.	