OPTCORE

Transceiver Test Report

PN: OSP1250-8505DCR (SFP-1G-SX)

Test by: Maddy | Date: 2025/12/16

I. Test Purpose

By building realistic switch use cases, we test whether the OSP1250-8505DCR (SFP-1G-SX) transceiver meets industry standards, performs at a high level, and is compatible with the target switch platform.

II. Test Results Summary

Test items	Test Result	Note
Compatibility Test	Pass	Check whether the transceiver is compatible with the target switch
Digital Diagnostic Monitoring	Pass	Check whether the DDM parameters have exceeded the threshold value
Transmission Distance Test	Pass	Check whether the transceiver meets the distance specification

III. Test Environment

3.1 Test Sample

Vendor Name	Part Number	Serial Number	Description
OPTCORE	OSP1250-8505DCR	25E4403511	1000BASE-SX SFP MMF 850nm 550m Transceiver
OPTCORE	OSP1250-8505DCR	25E4403512	1000BASE-SX SFP MMF 850nm 550m Transceiver

3.2 Test Equipment Used

Equipment Brand	Equipment Model	Software Version/Note
Cisco	WS-C3750-24TS	12.2(25)SEE
OPTCORE	LC-LC-OM2-D550M	550m duplex LC multimode patch cable

IV. Test Data

4.1 Compatibility Test

Test Data	 C3750>show inventory NAME: "1", DESCR: "WS-C3750-24TS" PID: WS-C3750-24TS-E , VID: V05, SN: CAT1016Z182 NAME: "GigabitEthernet1/0/1", DESCR: "1000BaseSX SFP" PID: GLC-SX-MMD , VID: V86, SN: 25E4403512 NAME: "GigabitEthernet1/0/2", DESCR: "1000BaseSX SFP" PID: GLC-SX-MMD , VID: V86, SN: 25E4403511
Test Conclusion	The optical transceiver was successfully recognized by the Cisco WS-C3750-24TS, with all identification information accurately displayed in the outputs.

4.2 Digital Diagnostic Monitoring

Test Data	C3750>show interface transceiver detail mA: milliamperes, dBm: decibels (milliwatts), NA or N/A: not applicable. ++ : high alarm, + : high warning, - : low warning, -- : low alarm. A2D readouts (if they differ), are reported in parentheses. The threshold values are calibrated. High Alarm High Warn Low Warn Low Alarm Temperature Threshold Threshold Threshold Threshold Port (Celsius) (Celsius) (Celsius) (Celsius) (Celsius) ------- ------------------ ---------- --------- --------- --------- Gi1/0/1 21.8 90.0 85.0 -5.0 -10.0 Gi1/0/2 21.8 90.0 85.0 -5.0 -10.0 High Alarm High Warn Low Warn Low Alarm Voltage Threshold Threshold Threshold Threshold Port (Volts) (Volts) (Volts) (Volts) (Volts) ------- ---------- ---------- --------- --------- --------- Gi1/0/1 3.28 3.70 3.60 3.00 2.90 Gi1/0/2 3.32 3.70 3.60 3.00 2.90 High Alarm High Warn Low Warn Low Alarm Current Threshold Threshold Threshold Threshold Port (milliamperes) (mA) (mA) (mA) (mA) ------- ---------- ---------- --------- --------- ---------

	Gi1/0/1 4.5 15.0 12.0 2.0 1.0 Gi1/0/2 4.5 15.0 12.0 2.0 1.0 Port / Optical Transmit Power (dBm) / High Alarm Threshold (dBm) / High Warn Threshold (dBm) / Low Warn Threshold (dBm) / Low Alarm Threshold (dBm) Gi1/0/1 -4.5 -17788.-32768 -2.9 -9.5 -13.4 Gi1/0/2 -4.3 -17788.-32768 -2.9 -9.5 -13.4 Port / Optical Receive Power (dBm) / High Alarm Threshold (dBm) / High Warn Threshold (dBm) / Low Warn Threshold (dBm) / Low Alarm Threshold (dBm) Gi1/0/1 -4.4 3.0 -17788.-32768 -16.9 -21.0 Gi1/0/2 -4.5 3.0 -17788.-32768 -16.9 -21.0
Test Conclusion	After testing, the above transceiver on the Cisco WS-C3750-24TS DDM is normally identified, the parameters do not exceed thresholds, and the transceiver operates normally.

4.3 Transmission Distance Test

Test Conclusion	In this test, optical transceiver modules were connected using 550m OM2 fiber cables to verify link stability. The modules were inserted into the switches and established a point-to-point connection. The link was monitored for one hour to check for any bit errors, packet loss, link drops, or interruptions. All connections remained stable and error-free, indicating that the modules perform reliably over an 550m fiber link.

Appendix A. Document Revision

Version No	Date	Description
V1.0/EN	2025-12-16	Preliminary test report