OPTCORE

Transceiver Test Report

PN: OSP1250-3120DCR (SFP-1G-LX)

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

I. Test Purpose

By building realistic switch use cases, we test whether the OSP1250-3120DCR (SFP-1G-LX) 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

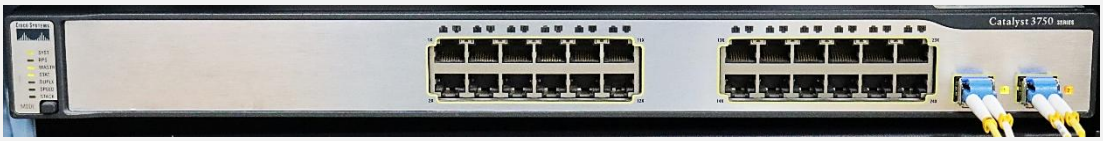
Vendor Name	Part Number	Serial Number	Description
OPTCORE	OSP1250-3120DCR	25E4402305	1000BASE-LX SFP SMF 1310nm 20km Transceiver
OPTCORE	OSP1250-3120DCR	25E4402306	1000BASE-LX SFP SMF 1310nm 20km Transceiver

3.2 Test Equipment Used

Equipment Brand	Equipment Model	Software Version/Note
Cisco	WS-C3750-24TS	12.2(25)SEE
OPTCORE	LC-LC-OS2-D20KM	20km duplex LC single mode patch cable

IV. Test Data

4.1 Compatibility Test

Test Data	 C3750>show inv NAME: "1", DESCR: "WS-C3750-24TS" PID: WS-C3750-24TS-E , VID: V05, SN: CAT1016Z182

	NAME: "GigabitEthernet1/0/1", DESCR: "1000BaseLX SFP" PID: GLC-LH-SMD , VID: V86, SN: 25E4402306 NAME: "GigabitEthernet1/0/2", DESCR: "1000BaseLX SFP" PID: GLC-LH-SMD , VID: V86, SN: 25E4402305
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.

Port	Temperature (Celsius)	High Alarm Threshold (Celsius)	High Warn Threshold (Celsius)	Low Warn Threshold (Celsius)	Low Alarm Threshold (Celsius)
Gi1/0/1	27.7	90.0	85.0	-5.0	-10.0
Gi1/0/2	27.0	90.0	85.0	-5.0	-10.0

Port	Voltage (Volts)	High Alarm Threshold (Volts)	High Warn Threshold (Volts)	Low Warn Threshold (Volts)	Low Alarm Threshold (Volts)
Gi1/0/1	3.26	3.70	3.60	3.00	2.90
Gi1/0/2	3.31	3.70	3.60	3.00	2.90

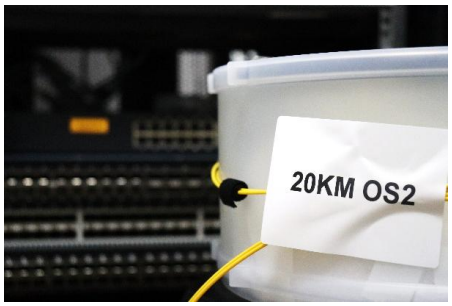
Port	Current (milliamperes)	High Alarm Threshold (mA)	High Warn Threshold (mA)	Low Warn Threshold (mA)	Low Alarm Threshold (mA)
Gi1/0/1	19.6	100.0	90.0	3.0	1.0
Gi1/0/2	19.5	100.0	90.0	3.0	1.0

Port	Optical Transmit Power (dBm)	High Alarm Threshold (dBm)	High Warn Threshold (dBm)	Low Warn Threshold (dBm)	Low Alarm Threshold (dBm)
Gi1/0/1	-5.3	0.9	-2.9	-9.5	-13.4
Gi1/0/2	-4.9	0.9	-2.9	-9.5	-13.4

	Optical	High Alarm	High Warn	Low Warn	Low Alarm

	Port Receive Power (dBm) Threshold (dBm) Threshold (dBm) Threshold (dBm) Threshold (dBm) ------- ---------- ---------- ---------- ---------- ---------- Gi1/0/1 -4.5 0.9 -2.9 -18.9 -23.0 Gi1/0/2 -4.3 0.9 -2.9 -18.9 -23.0
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, OSP1250-3120DCR (SFP-1G-LX) modules were connected using 20km single mode fiber (SMF) 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 20km single mode fiber link.

Appendix A. Document Revision

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