

Transceiver Test Report

PN: OSP1250-3140DCR (SFP-1G-EX)

I. Test Purpose

By building realistic switch use cases, we test whether the OSP1250-3140DCR (SFP-1G-EX) 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	OSP1250-3140DCR	24G4400489	1000BASE-EX SFP 1310nm 40km Transceiver
OPTCORE	OSP1250-3140DCR	24G4400490	1000BASE-EX SFP 1310nm 40km Transceiver

3.2 Test Equipment Used

Equipment Brand	Equipment Model	Software Version/Note
Cisco	WS-C3750-24TS	12.2(25)SEE
OPTCORE	LC-LC-SM-D40KM	40km duplex LC single mode patch cable

IV. Test Data

4.1 Compatibility Test

Test Data	 <pre> 00:04:03: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/1, changed state to up 00:04:03: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/2, changed state to up </pre>
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	<pre>C3750>show inventory NAME: "1", DESCR: "WS-C3750-24TS" PID: WS-C3750-24TS-E , VID: V05, SN: CAT1016Z182 NAME: "GigabitEthernet1/0/1", DESCR: "1000BaseZX SFP" PID: GLC-EX-SMD , VID: V86, SN: 24G4400490 NAME: "GigabitEthernet1/0/2", DESCR: "1000BaseZX SFP" PID: GLC-EX-SMD , VID: V86, SN: 24G4400489</pre>
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	<pre>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.</pre>					
			High Alarm	High Warn	Low Warn	Low Alarm
		Temperature	Threshold	Threshold	Threshold	Threshold
	Port	(Celsius)	(Celsius)	(Celsius)	(Celsius)	(Celsius)
	-----	-----	-----	-----	-----	-----
	Gi1/0/1	17.3	90.0	85.0	-5.0	-10.0
	Gi1/0/2	18.6	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)
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Gi1/0/1	3.28	3.70	3.60	3.00	2.90	
Gi1/0/2	3.30	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	14.9	100.0	90.0	3.0	1.0	
Gi1/0/2	16.7	100.0	90.0	3.0	1.0	
	Optical	High Alarm	High Warn	Low Warn	Low Alarm	
	Transmit Power	Threshold	Threshold	Threshold	Threshold	
Port	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	

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	Gi1/0/1	-2.0	3.0	2.0	-9.5	-10.-32768
	Gi1/0/2	-1.5	3.0	2.0	-9.5	-10.-32768
	Port	Optical Receive Power (dBm)	High Alarm Threshold (dBm)	High Warn Threshold (dBm)	Low Warn Threshold (dBm)	Low Alarm Threshold (dBm)
	-----	-----	-----	-----	-----	-----
	Gi1/0/1	-1.7	0.9	-17788.-32768	-30.-32768	-32.2
	Gi1/0/2	-1.6	0.9	-17788.-32768	-30.-32768	-32.2
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, OSP1250-3140DCR (SFP-1G-EX) modules were connected using 40km 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 40km single mode fiber link.
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Appendix A. Document Revision

Version No	Date	Description
V1.0/EN	2026-01-06	Preliminary test report

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