

Transceiver Test Report

PN: OSP10G-8503DCR (SFP-10G-SR)

I. Test Purpose

By building realistic switch use cases, we test whether the OSP10G-8503DCR (SFP-10G-SR) 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	OSP10G-8503DCR	25G4408664	10GBASE-SR SFP+ MMF 850nm 300m Transceiver
OPTCORE	OSP10G-8503DCR	25G4408663	10GBASE-SR SFP+ MMF 850nm 300m Transceiver

3.2 Test Equipment Used

Equipment Brand	Equipment Model	Software Version/Note
Cisco	Nexus9000 C92160YC-X chassis	07.59
OPTCORE	LC-LC-OM3-D300M	300m duplex LC OM3 patch cable

IV. Test Data

4.1 Compatibility Test



Test Data

```
switch# show interface transceiver
Ethernet1/1
    transceiver is not present
Ethernet1/2
    transceiver is not present
Ethernet1/3
    transceiver is not present
Ethernet1/4
    transceiver is not present
Ethernet1/5
    transceiver is not present
Ethernet1/6
    transceiver is not present
Ethernet1/7
    transceiver is not present
Ethernet1/8
    transceiver is not present
Ethernet1/9
    transceiver is not present
Ethernet1/10
    transceiver is not present
Ethernet1/11
    transceiver is not present
Ethernet1/12
    transceiver is not present
Ethernet1/13
    transceiver is not present
Ethernet1/14
    transceiver is not present
Ethernet1/15
    transceiver is present
    type is 10Gbase-SR
    name is OPTCORE
    part number is OSP10G-8503DCR
    revision is A
    serial number is 25G4408664
```

nominal bitrate is 10300 MBit/sec
Link length supported for 50/125um OM2 fiber is 82 m
Link length supported for 62.5/125um fiber is 26 m
Link length supported for 50/125um OM3 fiber is 300 m
cisco id is 3
cisco extended id number is 4

Ethernet1/16

transceiver is present
type is 10Gbase-SR
name is OPTCORE
part number is OSP10G-8503DCR
revision is A
serial number is 25G4408663
nominal bitrate is 10300 MBit/sec
Link length supported for 50/125um OM2 fiber is 82 m
Link length supported for 62.5/125um fiber is 26 m
Link length supported for 50/125um OM3 fiber is 300 m
cisco id is 3
cisco extended id number is 4Ethernet1/17
transceiver is not present

Ethernet1/18

transceiver is not present

Ethernet1/19

transceiver is not present

Ethernet1/20

transceiver is not present

Ethernet1/21

transceiver is not present

Ethernet1/22

transceiver is not present

Ethernet1/23

transceiver is not present

Ethernet1/24

transceiver is not present

Ethernet1/25

transceiver is not present

Ethernet1/26

transceiver is not present

Ethernet1/27

transceiver is not present

Ethernet1/28

transceiver is not present

Ethernet1/29

transceiver is not present

Ethernet1/30
transceiver is not present

Ethernet1/31
transceiver is not present

Ethernet1/32
transceiver is not present

Ethernet1/33
transceiver is not present

Ethernet1/34
transceiver is not present

Ethernet1/35
transceiver is not present

Ethernet1/36
transceiver is not present

Ethernet1/37
transceiver is not present

Ethernet1/38
transceiver is not present

Ethernet1/39
transceiver is not present

Ethernet1/40
transceiver is not present

Ethernet1/41
transceiver is not present

Ethernet1/42
transceiver is not present

Ethernet1/43
transceiver is not present

Ethernet1/44
transceiver is not present

Ethernet1/45
transceiver is not present

Ethernet1/46
transceiver is not present

Ethernet1/47
transceiver is not present

Ethernet1/48
transceiver is not present

Ethernet1/49
transceiver is not present

Ethernet1/50
transceiver is not present

Ethernet1/51
transceiver is not present

Ethernet1/52

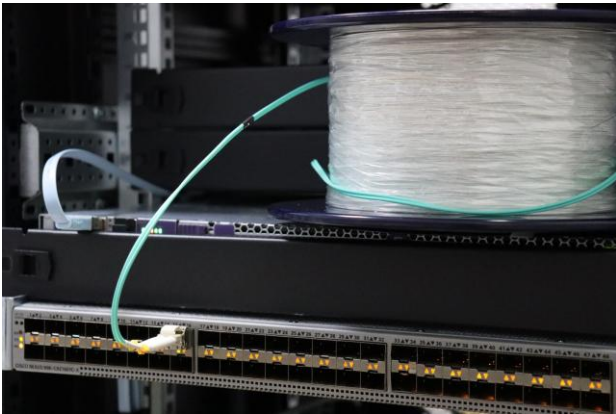
	<pre> transceiver is not present Ethernet1/53 transceiver is not present Ethernet1/54 transceiver is not present </pre>
<p>Test Conclusion</p>	<p>The optical transceiver was successfully recognized by the Cisco Nexus9000 C92160YC-X chassis, with all identification information accurately displayed in the outputs.</p>

4.2 Digital Diagnostic Monitoring

Test Data	<pre> switch# show interface transceiver details Ethernet1/15 transceiver is present type is 10Gbase-SR name is OPTCORE part number is OSP10G-8503DCR revision is A serial number is 25G4408664 nominal bitrate is 10300 MBit/sec Link length supported for 50/125um OM2 fiber is 82 m Link length supported for 62.5/125um fiber is 26 m Link length supported for 50/125um OM3 fiber is 300 m cisco id is 3 cisco extended id number is 4 </pre>																																														
	<p style="text-align: center;">SFP Detail Diagnostics Information (internal calibration)</p> <hr/> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th>Current</th> <th colspan="2">Alarms</th> <th colspan="2">Warnings</th> </tr> <tr> <th>Measurement</th> <th>High</th> <th>Low</th> <th>High</th> <th>Low</th> </tr> </thead> <tbody> <tr> <td>Temperature</td> <td>29.59 C</td> <td>90.00 C</td> <td>-10.00 C</td> <td>85.00 C</td> <td>-5.00 C</td> </tr> <tr> <td>Voltage</td> <td>3.32 V</td> <td>3.70 V</td> <td>2.90 V</td> <td>3.59 V</td> <td>3.00 V</td> </tr> <tr> <td>Current</td> <td>6.51 mA</td> <td>15.00 mA</td> <td>1.00 mA</td> <td>13.00 mA</td> <td>2.00 mA</td> </tr> <tr> <td>Tx Power</td> <td>-2.00 dBm</td> <td>1.99 dBm</td> <td>-7.01 dBm</td> <td>0.99 dBm</td> <td>-6.00 dBm</td> </tr> <tr> <td>Rx Power</td> <td>-2.26 dBm</td> <td>1.99 dBm</td> <td>-13.01 dBm</td> <td>0.99 dBm</td> <td>-12.00 dBm</td> </tr> <tr> <td colspan="6">Transmit Fault Count = 0</td> </tr> </tbody> </table> <hr/> <p>Note: ++ high-alarm; + high-warning; -- low-alarm; - low-warning</p> <pre> Ethernet1/16 transceiver is present type is 10Gbase-SR name is OPTCORE part number is OSP10G-8503DCR </pre>		Current	Alarms		Warnings		Measurement	High	Low	High	Low	Temperature	29.59 C	90.00 C	-10.00 C	85.00 C	-5.00 C	Voltage	3.32 V	3.70 V	2.90 V	3.59 V	3.00 V	Current	6.51 mA	15.00 mA	1.00 mA	13.00 mA	2.00 mA	Tx Power	-2.00 dBm	1.99 dBm	-7.01 dBm	0.99 dBm	-6.00 dBm	Rx Power	-2.26 dBm	1.99 dBm	-13.01 dBm	0.99 dBm	-12.00 dBm	Transmit Fault Count = 0				
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<p style="text-align: center;">Test Conclusion</p>	<p>After testing, the above transceiver on the Cisco Nexus9000 C92160YC-X chassis DDM is normally identified, the parameters do not exceed thresholds, and the transceiver operates normally.</p>																																														

4.3 Transmission Distance Test

<p style="text-align: center;">Test Conclusion</p>	<div style="text-align: center;">  </div> <p>In this test, optical transceiver modules were connected using 300-meter OM3 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 300-meter fiber link.</p>
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Appendix A. Document Revision

Version No	Date	Description
V1.0/EN	2025-12-10	Preliminary test report

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