



OPTICAL TRANSCEIVER TEST REPORT

Tested by: Betty | Date: 2022.10.10

1. Test Purpose

Test objects: QDD-400G-CU3, through the corresponding tests, the test parameters conform to the relevant industry standards, and the test transceivers can be used normally in Cisco brand equipment, laying the foundation for the subsequent cooperation with customers.

2. Test items

Test items		Test details
Compatibility Testing	Connectivity testing	The transceiver can connect both ends of the device normally, and the device port status is up.
	Parameter testing	The transceiver PN, VN, SN, and DDM information read by the device is consistent with the module tag description.

3. Test environment

3.1. Test samples

Vendor Name	Part Number	Serial Number	Transceiver Description
NADDOD	QDD-400G-CU3	ACS22060700 590	3m (10ft) 400G QSFP-DD Passive Direct Attach Copper Twinax Cable 28AWG

3.2. Test equipment

Equipment Brand	Equipment Model	Software version (running)
Cisco	Cisco N9K-C9316D-QX	BIOS: version 05.39 NXOS: version 9.3(3)

4. Test data

4.1. Connectivity testing

<p>Test Method</p>	<ol style="list-style-type: none"> 1. Check whether the device status is normal; 2. Check whether the port device port LED is green; (individual brand port LED is yellow or white) 3. Check whether the device port is normally linked up; 4. Check whether the device port rate is up to standard.
<p>Test Data</p>	<pre> 9316D-GX# show inventory NAME: "Chassis", DESCR: "Nexus9000 N9K-C9316D-GX Chassis" PID: N9K-C9316D-GX , VID: V01 , SN: FDO23430E7Z NAME: "Slot 1", DESCR: "16x400G/100G/40G QSFP-DD Ethernet Module" PID: N9K-C9316D-GX , VID: V01 , SN: FDO23430E7Z NAME: "Power Supply 1", DESCR: "Nexus9000 N9K-C9316D-GX Chassis Power Supply" PID: NXA-PAC-1100W-PE2 , VID: V03 , SN: ART2413FBNV NAME: "Power Supply 2", DESCR: "Nexus9000 N9K-C9316D-GX Chassis Power Supply" PID: NXA-PAC-1100W-PE2 , VID: V03 , SN: ART2413FBP3 NAME: "Fan 1", DESCR: "Nexus9000 N9K-C9316D-GX Chassis Fan Module" PID: NXA-FAN-35CFM-PE , VID: V01 , SN: N/A NAME: "Fan 2", DESCR: "Nexus9000 N9K-C9316D-GX Chassis Fan Module" PID: NXA-FAN-35CFM-PE , VID: V01 , SN: N/A NAME: "Fan 3", DESCR: "Nexus9000 N9K-C9316D-GX Chassis Fan Module" PID: NXA-FAN-35CFM-PE , VID: V01 , SN: N/A NAME: "Fan 4", DESCR: "Nexus9000 N9K-C9316D-GX Chassis Fan Module" PID: NXA-FAN-35CFM-PE , VID: V01 , SN: N/A NAME: "Fan 5", DESCR: "Nexus9000 N9K-C9316D-GX Chassis Fan Module" PID: NXA-FAN-35CFM-PE , VID: V01 , SN: N/A NAME: "Fan 6", DESCR: "Nexus9000 N9K-C9316D-GX Chassis Fan Module" PID: NXA-FAN-35CFM-PE , VID: V01 , SN: N/A 9316D-GX# show interface status ----- ----- Port Name Status Vlan Duplex Speed Type ----- ----- </pre>

	<pre> mgmt0 -- notconnec routed auto auto -- ----- ----- Port Name Status Vlan Duplex Speed Type ----- Eth1/1 -- connected 1 full 400G QSFP-DD-400 G-COPPER Eth1/2 -- xcvrAbsen 1 auto auto -- Eth1/3 -- xcvrAbsen 1 auto auto -- Eth1/4 -- xcvrAbsen 1 auto auto -- Eth1/5 -- xcvrAbsen 1 auto auto -- Eth1/6 -- xcvrAbsen 1 auto auto -- Eth1/7 -- xcvrAbsen 1 auto auto -- Eth1/8 -- xcvrAbsen 1 auto auto -- Eth1/9 -- xcvrAbsen 1 auto auto -- Eth1/10 -- xcvrAbsen 1 auto auto -- Eth1/11 -- xcvrAbsen 1 auto auto -- Eth1/12 -- xcvrAbsen 1 auto auto -- Eth1/13 -- xcvrAbsen 1 auto auto -- Eth1/14 -- xcvrAbsen 1 auto auto -- Eth1/15 -- xcvrAbsen 1 auto auto -- Eth1/16 -- connected 1 full 400G QSFP-DD-400 G-COPPER </pre>					
Test Situation	QDD-400G-CU3					
	Port Number	Port 1		Port 16		
	Port Status	active		active		
	Port Link Rate	400G		400G		
Test Conclusion	After testing, the above transceivers are normally connected on Cisco N9K-C9316D-GX, the device port LEDs at both ends are always on green, the link is linkup.					
Remarks						

4.2. Parameter Testing

<p>Test Method</p>	<ol style="list-style-type: none"> 1. check whether the basic information such as module manufacturer name, model name and serial number is correct. 2. check whether the module transmission distance, wavelength, type and other key parameters are correct. 3. check whether the module DDM parameters have exceeded the threshold value.
<p>Test Data</p>	<p>Port : 1</p> <p>9316D-GX# show interface ethernet 1/1 tran details</p> <p>Ethernet1/1</p> <ul style="list-style-type: none"> transceiver is present type is QSFP-DD-400G-COPPER name is NADDOD part number is QDD-400G-CU3 revision is A serial number is ACS22060700590 nominal bitrate is 425000 MBit/sec per channel cisco id is 0x18 vendor OUI is 000000 date code is 200508 power class is 1 (1.5 W maximum) max power is 0.25 W cable attenuation is 9/11/16/0/0 dB for bands 5/7/12.9/25.8/56 GHz near-end lanes used none far-end lane code for 8 lanes abcdefgh media interface is copper cable unequalized Advertising code is Passive Cu Host electrical interface code is 50GBase-CR (Clause 126) Cable Length is 3.0 M <p>DOM is not supported</p> <p>Port : 16</p> <p>9316D-GX# show interface ethernet 1/16 tran det</p> <p>Ethernet1/16</p> <ul style="list-style-type: none"> transceiver is present type is QSFP-DD-400G-COPPER name is NADDOD part number is QDD-400G-CU3 revision is A serial number is ACS22060700590 nominal bitrate is 425000 MBit/sec per channel cisco id is 0x18 vendor OUI is 000000 date code is 200508

	<p>power class is 1 (1.5 W maximum) max power is 0.25 W cable attenuation is 9/11/16/0/0 dB for bands 5/7/12.9/25.8/56 GHz near-end lanes used none far-end lane code for 8 lanes abcdefgh media interface is copper cable unequalized Advertising code is Passive Cu Host electrical interface code is 50GBase-CR (Clause 126) Cable Length is 3.0 M</p> <p>DOM is not supported</p>	
Test situation	QDD-400G-CU3	
	Vendor	NADDOD
	Part Number	QDD-400G-CU3
	Serial Number	ACS22060700590
	Link Length	3m
	Transceiver Type	QSFP-DD-400G-COPPER
	DDM Alarm	NO
Test Conclusion	After testing, the above Transceiver on Cisco N9K-C9316D-GX vendor name, part number, serial number, DDM and other information is normally identified, the five DDM parameters do not exceed the level I and II thresholds, and the Transceiver operates normally.	
Remarks		

5. Appendix

5.1 Transceiver compatibility testing standards

On the basis of the threshold range, the allowed deviation value should be within the standard range specified by the industry protocol.

Content	Details	Standard
Basic Information	Part Number	The part number read by the device is the same as the Part Number on the label. (If there are special requirements, the actual information shall prevail)
	Serial Number	The serial number read by the device is the same as the serial number on the label. (If there is special requirement, the actual information shall

		prevail).
	Vendor	The vendor name information read is NADDOD.(If there are special requirements, the actual information shall prevail).
	Transceiver Type	Transceiver information read by the device is consistent with that specified on the actual optics protocol specification (SFF-8636/SFF-8679).
	Wavelength	Transceiver wavelength information read by the device is consistent with the module description.
	Link Length	Transceiver maximum transmission distance information read by the device is consistent with the module description.
DDM Information	Temp	<ol style="list-style-type: none"> 1. The actual DDM information is within the DDM threshold and there are no alarms. 2. The DDM threshold range is in accordance with the module specification.
	Voltage	
	Tx Bias Current	
	Tx Power	
	Rx Power	
Port Information	Port Rate	The data rate information read on the switch port corresponds to the actual rate of the optics.
	Port Status	When the transceiver is connected, the port status information is UP.
	Switch Port LED Status	The port indicators on both ends of the transceiver will be green when the transceiver is connected.
	Port Count	No packet loss, no error code, no CRC, no other ERROR packets.
Device Log		The device does not have any transceiver warning message.

Further Information :

Web www.naddod.com

Email For order requirements: sales@naddod.com

For cooperation: agency@naddod.com

For customer service: support@naddod.com

For other informations: info@naddod.com

For technical support: tech@naddod.com

Disclaimer

1. We are committed to continuous product improvement and feature upgrades, and the contents contained in this manual are subject to change without notice.

2. Nothing herein should be construed as constituting an additional warranty.

3. NADDOD assumes no responsibility for the use or reliability of equipment or software not provided by NADDOD.

Copyright © NADDOD.COM All Rights Reserved, 2022