

# SFP-10G-T-80

## TEST REPORT (Cisco)



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## 1. Test Purpose

By building test scenarios and simulating the customer's usage environment, we test whether the module performance meets the customer's requirements.

## 2. Test Result Summary

Table 2-1: Test Result Summary

| Test Items               | Test Result |
|--------------------------|-------------|
| Muti-Version             | Pass        |
| Connectivity             | Pass        |
| Module Basic Information | Pass        |

## 3. Test Equipment Used

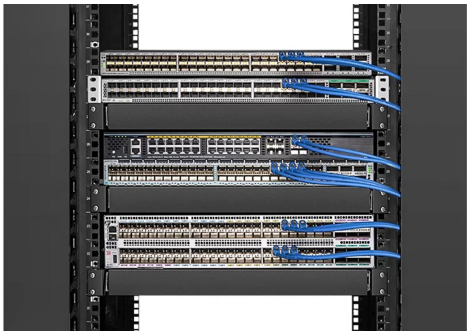
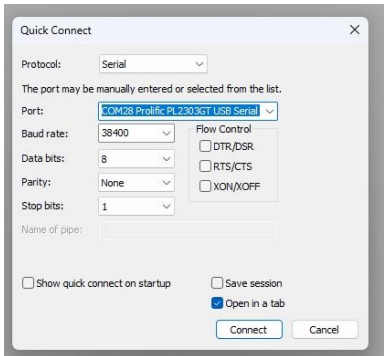
Table 3-1: Test Equipment Used

| Vendor                             | Device         | Soft Version/Compatible Brand | Serial Number              |
|------------------------------------|----------------|-------------------------------|----------------------------|
| Cisco Switch                       | C9500-24Y4C    | 17.12.03                      | /                          |
| Intel Network Interface Card (NIC) | Intel X710-DA2 | 9.50 0x8000f167               | /                          |
| FS Optical Transceiver Module      | SFP-10G-T-80   | Cisco Compatible              | Y2440004106<br>Y2440004497 |
| FS Server                          | RS7260         | /                             | /                          |

## 4. Test Data

### 4.1 Test Scenario

Table 4-1: Test Scenario

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Topology</b> | <p>Network topology:</p>  <p>Interoperability test scenario :</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Test Premise</b>  | <ol style="list-style-type: none"> <li>1. Confirm the brand, quantity and placement of the switches to be tested.</li> <li>2. Prepare control cables, test software and optical fiber patch cords. Power on the switches in advance.</li> <li>3. Locate the Console port on the switch, which is usually marked as "CON" on the switch, although some switches may display it as "IOIO" or a computer monitor icon, etc. Use a control cable to connect the switch to the computer.</li> </ol>  <ol style="list-style-type: none"> <li>4. Before connecting the software, it is necessary to confirm the connection port of the control cable. Go to the computer device manager, click on the ports (COM and LPT) to view the ports. After confirming the ports, proceed with the next step.</li> </ol> |
| <b>Test Method</b>   | <p>Click to open the SecureCRT Portable software and enter the quick connection interface.</p> <ol style="list-style-type: none"> <li>① Protocol selection: Serial</li> <li>② Port selection: The same as the port you viewed in the previous step</li> <li>③ Baud rate selection: The same as the baud rate of the port on the target switch</li> <li>④ Flow control: Do not check this option</li> </ol> <p>The remaining configurations can keep the default values.</p>                                                                                                                                                                                                                                                                                                                              |

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Steps</b> | <p>① Insert the module into the corresponding rate port of the switch, and connect the TX-RX ends with an optical fiber jumper or an MTP self-loop device. Observe whether the module is connected. If not connected, please check the jumper connection or the switch port configuration (login to the switch is required).</p> <p>② Enter the test interface, input the account and password, log in to the switch and enter privileged mode.</p> <p>③ According to the switch command configuration table, input the corresponding test command and view the relevant information: port status (connectivity), connection rate, alarm status, module basic information, etc. Determine whether it meets the requirements.</p> |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 4.2 Test Result

Table 4-2: Test Result

Test Information

1. Read the switch model name and software version, and read the status of all ports on the switch

C9500-24Y4C#show version  
Cisco IOS XE Software, Version 17.12.03  
Cisco IOS Software [Dublin], Catalyst L3 Switch Software (CAT9K\_IOSXE), Version 17.12.3, RELEASE SOFTWARE (fc7)  
Technical Support: <http://www.cisco.com/techsupport>  
Copyright (c) 1986-2024 by Cisco Systems, Inc.  
Compiled Wed 20-Mar-24 15:40 by mcpre

C9500-24Y4C#show interfaces status

| Port      | Name | Status     | Vlan   | Duplex | Speed | Type           |
|-----------|------|------------|--------|--------|-------|----------------|
| Twe1/0/1  |      | connected  | routed | full   | 10G   | SFP-10GBase-SR |
| Twe1/0/2  |      | notconnect | routed | full   | a-10G | unknown        |
| Twe1/0/3  |      | connected  | routed | full   | 10G   | SFP-10GBase-SR |
| Twe1/0/4  |      | notconnect | routed | full   | a-10G | unknown        |
| Twe1/0/5  |      | notconnect | routed | full   | a-10G | unknown        |
| Twe1/0/6  |      | notconnect | 1      | auto   | auto  | unknown        |
| Twe1/0/7  |      | notconnect | 1      | auto   | auto  | unknown        |
| Twe1/0/8  |      | notconnect | 1      | auto   | auto  | unknown        |
| Twe1/0/9  |      | notconnect | 1      | full   | auto  | unknown        |
| Twe1/0/10 |      | notconnect | 1      | auto   | auto  | unknown        |
| Twe1/0/11 |      | notconnect | 1      | full   | auto  | unknown        |
| Twe1/0/12 |      | notconnect | 1      | auto   | auto  | unknown        |
| Twe1/0/13 |      | notconnect | 1      | auto   | auto  | unknown        |
| Twe1/0/14 |      | notconnect | 1      | auto   | auto  | unknown        |
| Twe1/0/15 |      | notconnect | routed | auto   | auto  | unknown        |
| Twe1/0/16 |      | notconnect | 1      | auto   | auto  | unknown        |
| Twe1/0/17 |      | notconnect | 1      | auto   | auto  | unknown        |
| Twe1/0/18 |      | notconnect | 1      | auto   | auto  | unknown        |
| Twe1/0/19 |      | notconnect | 1      | auto   | 10G   | unknown        |

## 2. Verify the NIC port status

Test  
Information

```
[root@RS5220 ~]# ethtool ens4f0
```

```
Settings for ens4f0:
```

```
Supported ports: [ FIBRE ]
Supported link modes:  10000baseT/Full
Supported pause frame use: Symmetric Receive-only
Supports auto-negotiation: No
Supported FEC modes: Not reported
Advertised link modes: 10000baseT/Full
Advertised pause frame use: No
Advertised auto-negotiation: No
Advertised FEC modes: Not reported
Speed: 10000Mb/s
Duplex: Full
Auto-negotiation: off
Port: Direct Attach Copper
PHYAD: 0
Transceiver: internal
Supports Wake-on: d
Wake-on: d
Current message level: 0x00000007 (7)
                        drv probe link
```

```
Link detected: yes
```

```
[root@RS5220 ~]# ethtool ens4f1
```

```
Settings for ens4f1:
```

```
Supported ports: [ FIBRE ]
Supported link modes:  10000baseT/Full
Supported pause frame use: Symmetric Receive-only
Supports auto-negotiation: No
Supported FEC modes: Not reported
Advertised link modes: 10000baseT/Full
Advertised pause frame use: No
Advertised auto-negotiation: No
Advertised FEC modes: Not reported
Speed: 10000Mb/s
Duplex: Full
Auto-negotiation: off
Port: Direct Attach Copper
PHYAD: 0
Transceiver: internal
Supports Wake-on: d
Wake-on: d
Current message level: 0x00000007 (7)
                        drv probe link
```

```
Link detected: yes
```

## 3. Read the module's basic information from the switch side

## IDPROM for transceiver TwentyFiveGigE1/0/1:

|                                           |                                          |
|-------------------------------------------|------------------------------------------|
| Description                               | = SFP or SFP+ optics (type 3)            |
| Transceiver Type:                         | = SFP+ 10GBASE-SR (273)                  |
| Product Identifier (PID)                  | = SFP-10G-T-80                           |
| Vendor Revision                           | =                                        |
| Serial Number (SN)                        | = A2407030498                            |
| Vendor Name                               | = FS                                     |
| Vendor OUI (IEEE company ID)              | = 64.9D.99 (6593945)                     |
| CLEI code                                 | =                                        |
| Cisco part number                         | =                                        |
| Device State                              | = Enabled.                               |
| Date code (yy/mm/dd)                      | = 21/08/16                               |
| Connector type                            | = LC.                                    |
| Encoding                                  | = 64B/66B (6)                            |
| Nominal bitrate                           | = (10300 Mbits/s)                        |
| Minimum bit rate as % of nominal bit rate | = 88 % of 10300 Mbits/s                  |
| Maximum bit rate as % of nominal bit rate | = 10 % of 10300 Mbits/s                  |
| The transceiver type is 273               |                                          |
| Link reach for 9u fiber (km)              | = SX(550/270m) (0)                       |
|                                           | 1xFC-MM(500/300m) (0)                    |
|                                           | 2xFC-MM(300/150m) (0)                    |
|                                           | ESCON-MM(2km) (0)                        |
| Link reach for 9u fiber (m)               | = SX(550/270m) (0)                       |
|                                           | 1xFC-MM(500/300m) (0)                    |
|                                           | 2xFC-MM(300/150m) (0)                    |
|                                           | ESCON-MM(2km) (0)                        |
| Nominal laser wavelength                  | = 850 nm.                                |
| DWDM wavelength fraction                  | = 850.0 nm.                              |
| Supported options                         | = Tx disable                             |
|                                           | Tx fault signal                          |
|                                           | Loss of signal (standard implementation) |
| Supported enhanced options                | = Alarms for monitored parameters        |
|                                           | Software Tx disable                      |
|                                           | Software Tx fault monitoring             |
|                                           | Software Rx LOS monitoring               |
| Diagnostic monitoring                     | = none                                   |

Test  
Information

**Test  
Information**
**IDPROM for transceiver TwentyFiveGigE1/0/3:**

Description = SFP or SFP+ optics (type 3)  
 Transceiver Type: = SFP+ 10GBASE-SR (273)  
 Product Identifier (PID) = SFP-10G-T-80  
 Vendor Revision =  
 Serial Number (SN) = A2407030498  
 Vendor Name = FS  
 Vendor OUI (IEEE company ID) = 64.9D.99 (6593945)  
 CLEI code =  
 Cisco part number =  
 Device State = Enabled.  
 Date code (yy/mm/dd) = 21/08/16  
 Connector type = LC.  
 Encoding = 64B/66B (6)  
 Nominal bitrate = (10300 Mbits/s)  
 Minimum bit rate as % of nominal bit rate = 88 % of 10300 Mbits/s  
 Maximum bit rate as % of nominal bit rate = 10 % of 10300 Mbits/s  
 The transceiver type is 273  
 Link reach for 9u fiber (km) = SX(550/270m) (0)  
     1xFC-MM(500/300m) (0)  
     2xFC-MM(300/150m) (0)  
     ESCON-MM(2km) (0)  
 Link reach for 9u fiber (m) = SX(550/270m) (0)  
     1xFC-MM(500/300m) (0)  
     2xFC-MM(300/150m) (0)  
     ESCON-MM(2km) (0)  
 Nominal laser wavelength = 850 nm.  
 DWDM wavelength fraction = 850.0 nm.  
 Supported options = Tx disable  
     Tx fault signal  
     Loss of signal (standard implementation)  
 Supported enhanced options = Alarms for monitored parameters  
     Software Tx disable  
     Software Tx fault monitoring  
     Software Rx LOS monitoring  
 Diagnostic monitoring = none

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Test Information</b></p> | <p>4. Read the module's basic information from the NIC side</p> <pre>[root@RS5220 ~]# ethtool -m ens4f0 Identifier                : 0x03 (SFP) Extended identifier       : 0x04 (GBIC/SFP defined by 2-wire interface ID) Connector                 : 0x22 (RJ45) Transceiver codes         : 0x00 0x00 0x00 0x00 0x00 0x04 0x00 0x00 0x00 Transceiver type          : Passive Cable Encoding                  : 0x06 (64B/66B) BR, Nominal               : 10300MBd Rate identifier           : 0x02 (8/4/2G Rx Rate_Select only) Length (SMF,km)           : 0km Length (SMF)              : 0m Length (50um)             : 0m Length (62.5um)           : 0m Length (Copper)           : 80m Length (OM3)              : 0m Passive Cu complnce.      : 0x00 (unspecified) [SFF-8472 rev10.4 only] Vendor name               : FS Vendor OUI                : 00:1b:21 Vendor PN                 : SFP-10G-T-80 Vendor rev                : A Option values             : 0x00 0x3a Option                    : RX_LOS implemented Option                    : TX_FAULT implemented Option                    : TX_DISABLE implemented Option                    : RATE_SELECT implemented BR margin, max            : 0% BR margin, min            : 0% Vendor SN                 : A2407030502 Date code                 : 240718  [root@RS5220 ~]# ethtool -m ens4f1 Identifier                : 0x03 (SFP) Extended identifier       : 0x04 (GBIC/SFP defined by 2-wire interface ID) Connector                 : 0x22 (RJ45) Transceiver codes         : 0x00 0x00 0x00 0x00 0x00 0x04 0x00 0x00 0x00 Transceiver type          : Passive Cable Encoding                  : 0x06 (64B/66B) BR, Nominal               : 10300MBd Rate identifier           : 0x02 (8/4/2G Rx Rate_Select only) Length (SMF,km)           : 0km Length (SMF)              : 0m Length (50um)             : 0m Length (62.5um)           : 0m Length (Copper)           : 80m Length (OM3)              : 0m Passive Cu complnce.      : 0x00 (unspecified) [SFF-8472 rev10.4 only] Vendor name               : FS Vendor OUI                : 00:1b:21 Vendor PN                 : SFP-10G-T-80 Vendor rev                : A Option values             : 0x00 0x3a Option                    : RX_LOS implemented Option                    : TX_FAULT implemented Option                    : TX_DISABLE implemented Option                    : RATE_SELECT implemented BR margin, max            : 0% BR margin, min            : 0% Vendor SN                 : A2407030501 Date code                 : 240718</pre> |
| <p><b>Test Conclusion</b></p>  | <p>After completing the above test content, all the test information should be copied and pasted into a TXT document.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <p><b>Remarks</b></p>          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |