

# Cable Loss Calibration SOP

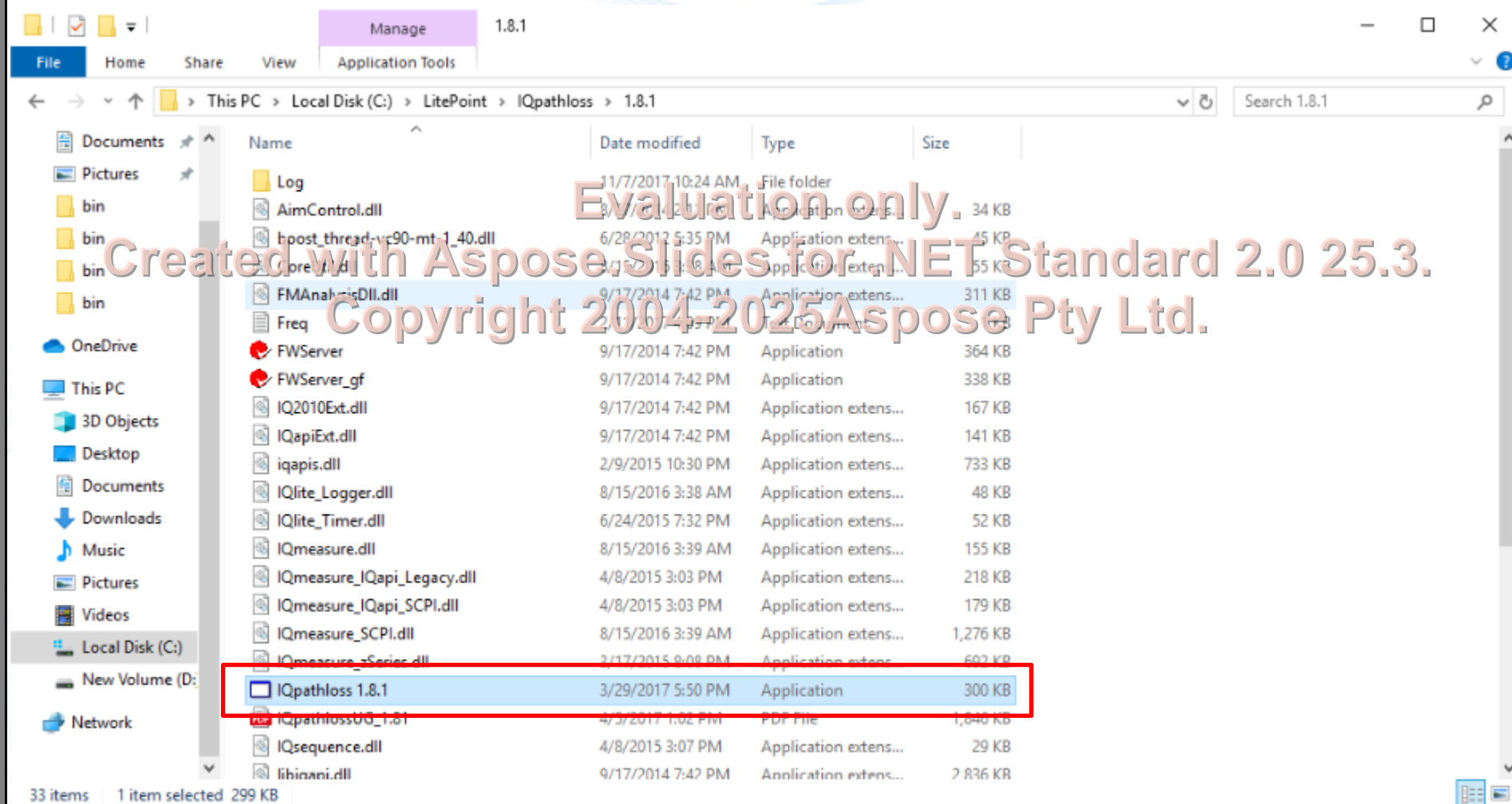
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*\*Cycle: 1time/week*

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Step 1: Run **IQpathloss 1.8.1** program.

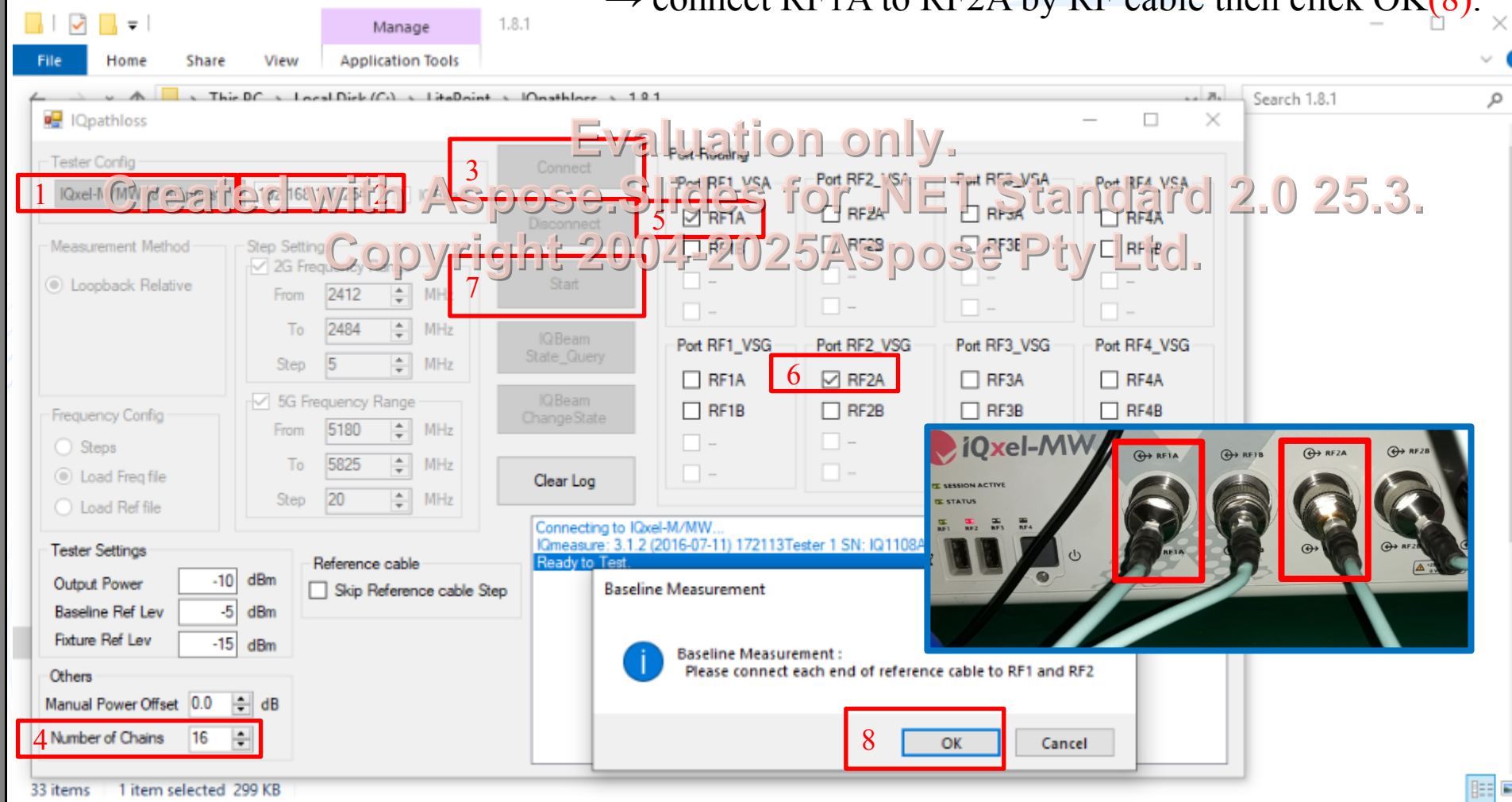


Step 2: IQpathloss windows is appeared as shown below, just follow step by step:

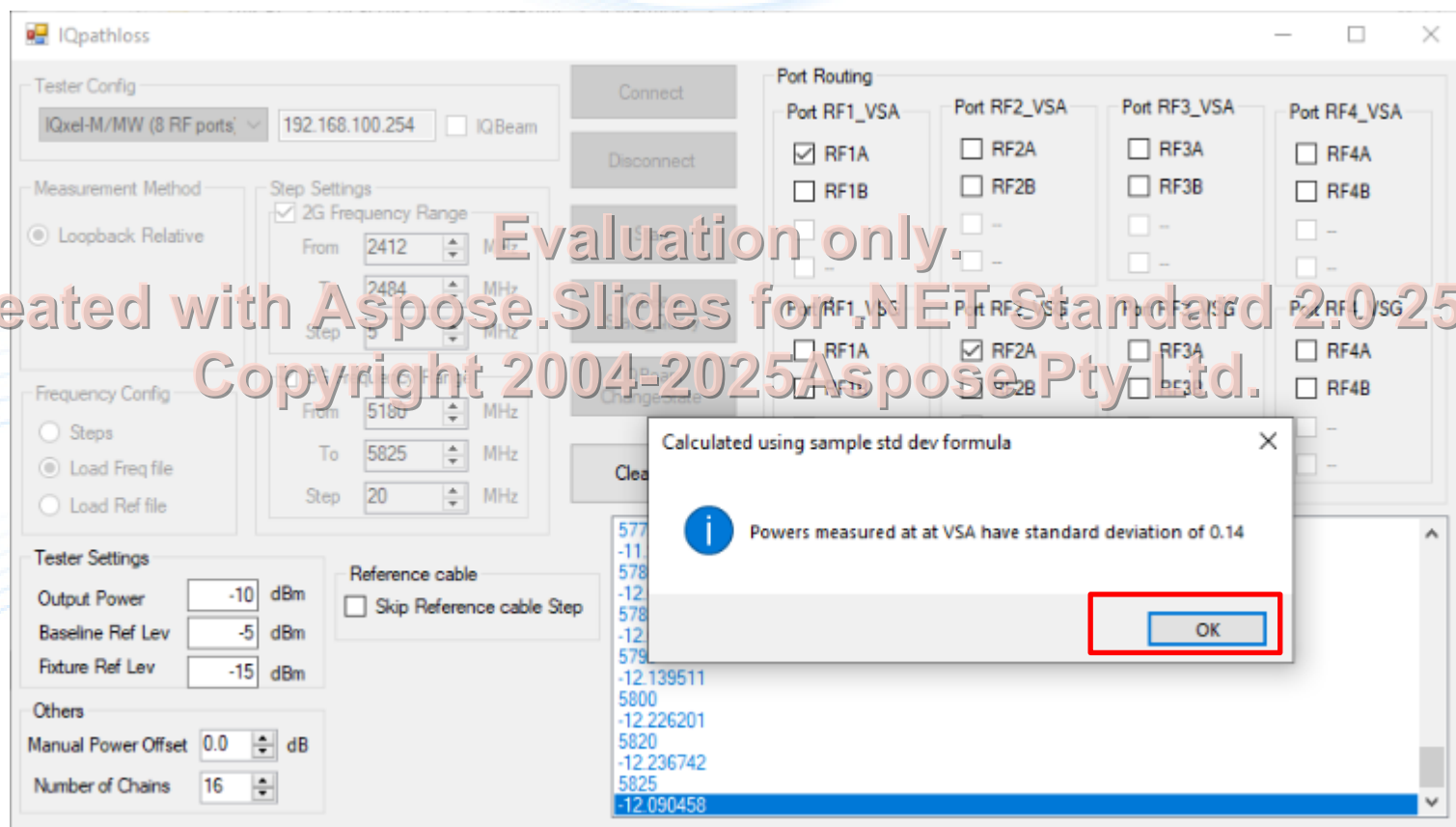
► Select IQxel device(1) → Set IP (2) → then Connect(3).

► Set Number of chains(4) → Select port routing(5)(6) → Click Start(7)

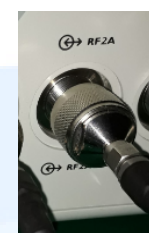
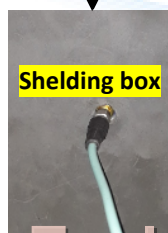
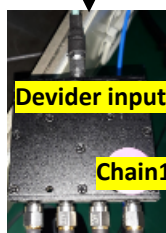
→ connect RF1A to RF2A by RF cable then click OK(8).



Step 3: Waiting for IQpathloss measuring, then click OK.



Step 4: IQpathloss inform Start on Chain 1, click OK(1) → Connect the RF cable to Chain1 as the below pictures → click OK(2)



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The image shows the IQpathloss software interface with two dialog boxes overlaid. The main window displays various settings for a measurement, including frequency ranges and power levels. The 'Chain 1 Measurement' dialog box is open, showing a message 'Start on Chain 1' and an 'OK' button labeled '1'. The 'Measurement of Fixture Pathloss' dialog box is also open, showing instructions for connecting the fixture and a '2' next to the 'OK' button.

Tester Config  
IQxel-M/MW (8 RF ports)

Measurement Method  
Loopback Relative

Frequency Config  
Steps  
Load Freq file  
Load Ref file

Tester Settings  
Output Power: -10 dBm  
Baseline Ref Lev: -5 dBm  
Fixture Ref Lev: -15 dBm  
Manual Power Offset: 0.0 dB  
Number of Chains: 16

Step Settings  
2G Frequency Range  
From: 2412 MHz  
To: 2484 MHz  
Step: 5 MHz  
5G Frequency Range  
From: 5180 MHz  
To: 5825 MHz  
Step: 20 MHz

Reference cable  
Skip Reference cable Step

Port Routing  
RF1A\_VoA  
RF1A  
RF1B  
Port RF1\_VSG  
RF1A  
RF1B

Chain 1 Measurement  
Start on Chain 1  
1 OK

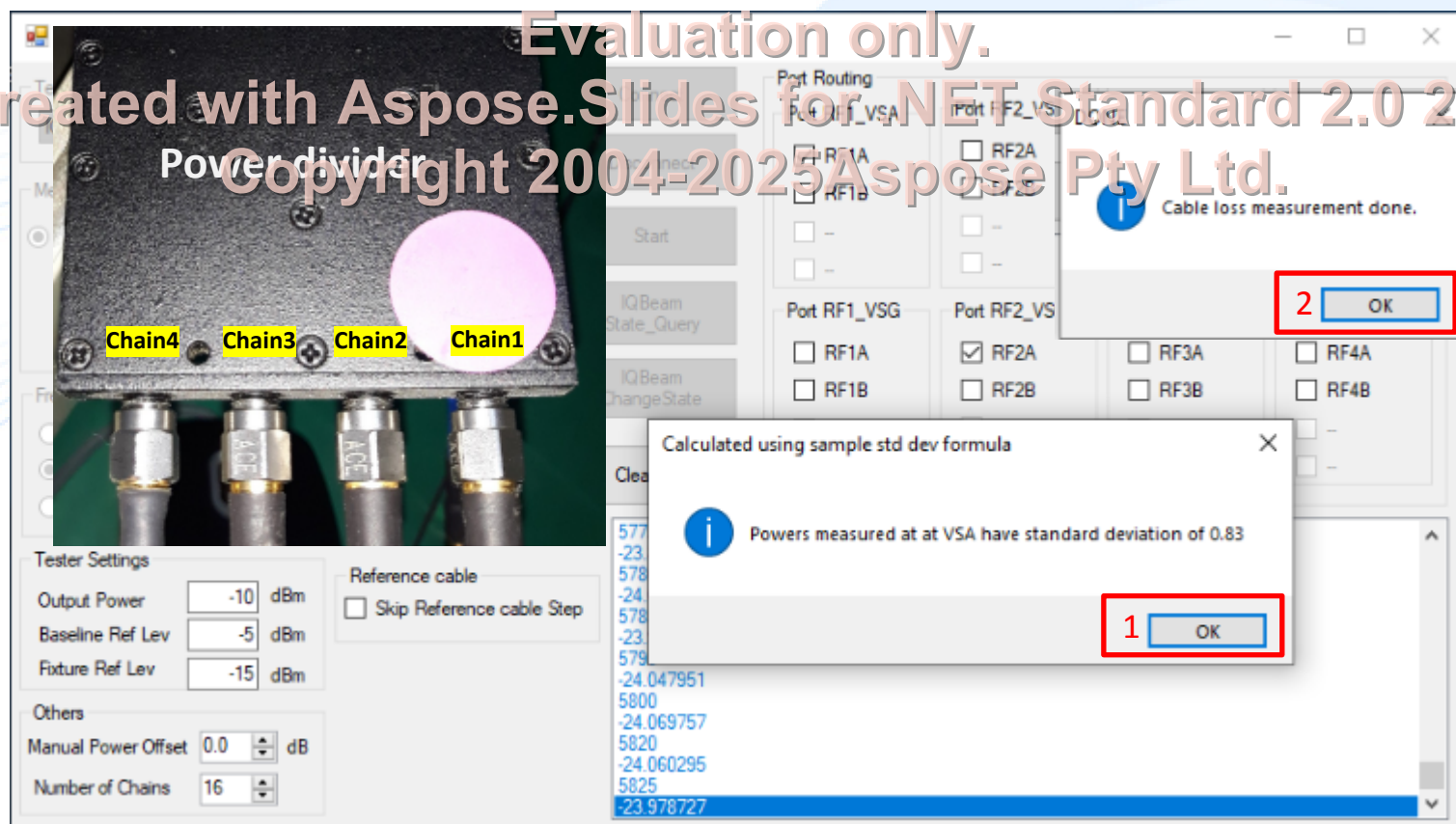
Measurement of Fixture Pathloss  
1. Please connect Chain 1 fixture/cable to be measured to RF1  
2. Connect the other end of fixture/cable with the reference cable to RF2  
2 OK Cancel

5775  
-11.943696  
5780  
-12.084797  
5785  
-12.056978  
5795  
-12.139511  
5800  
-12.226201  
5820  
-12.236742  
5825

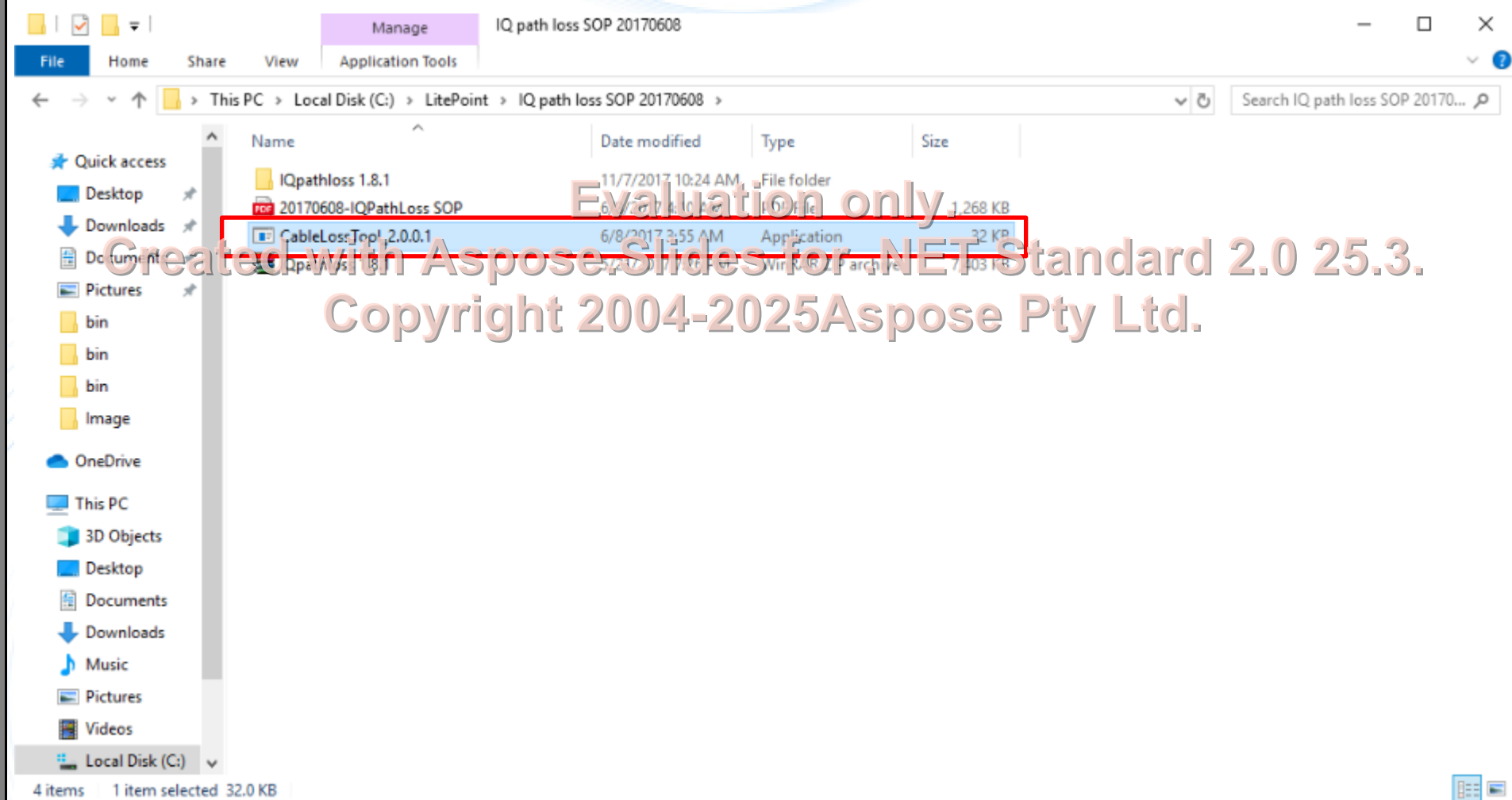


Step 5: Waiting for **Chain1** measurement results, click OK(1)

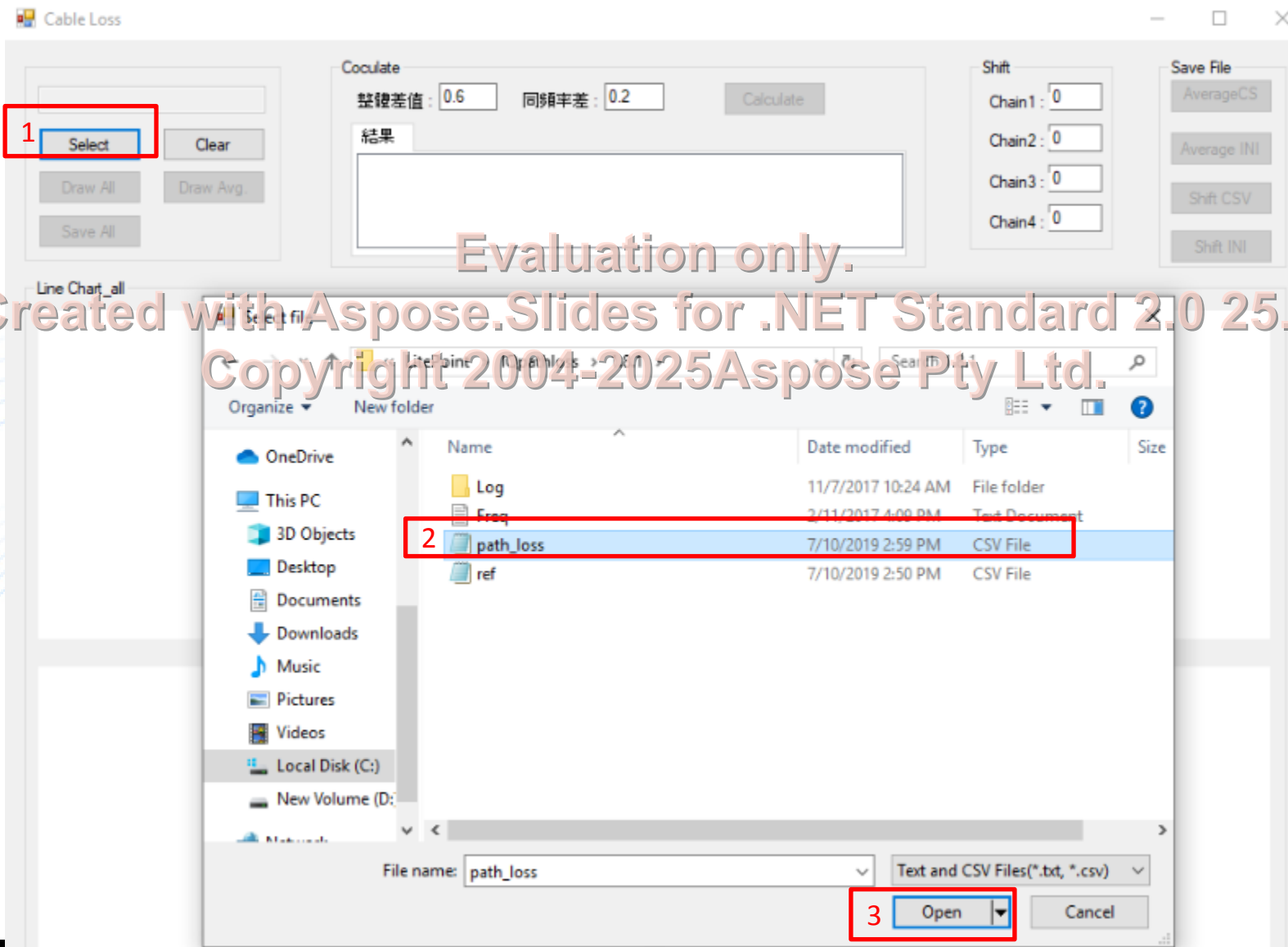
- ▶ Repeat step 5 until IQpathloss inform Start on Chain **5**, insert RF cable to **Chain2**
- ▶ Repeat step 5 until IQpathloss inform Start on Chain **9**, insert RF cable to **Chain3**
- ▶ Repeat step 5 until IQpathloss inform Start on Chain **13**, insert RF cable to **Chain4**
- ▶ Repeat step 5 until IQpathloss inform Cable loss measurement done., click OK(2)



Step 6: Run **CableLossTool\_2.0.0.1** program.



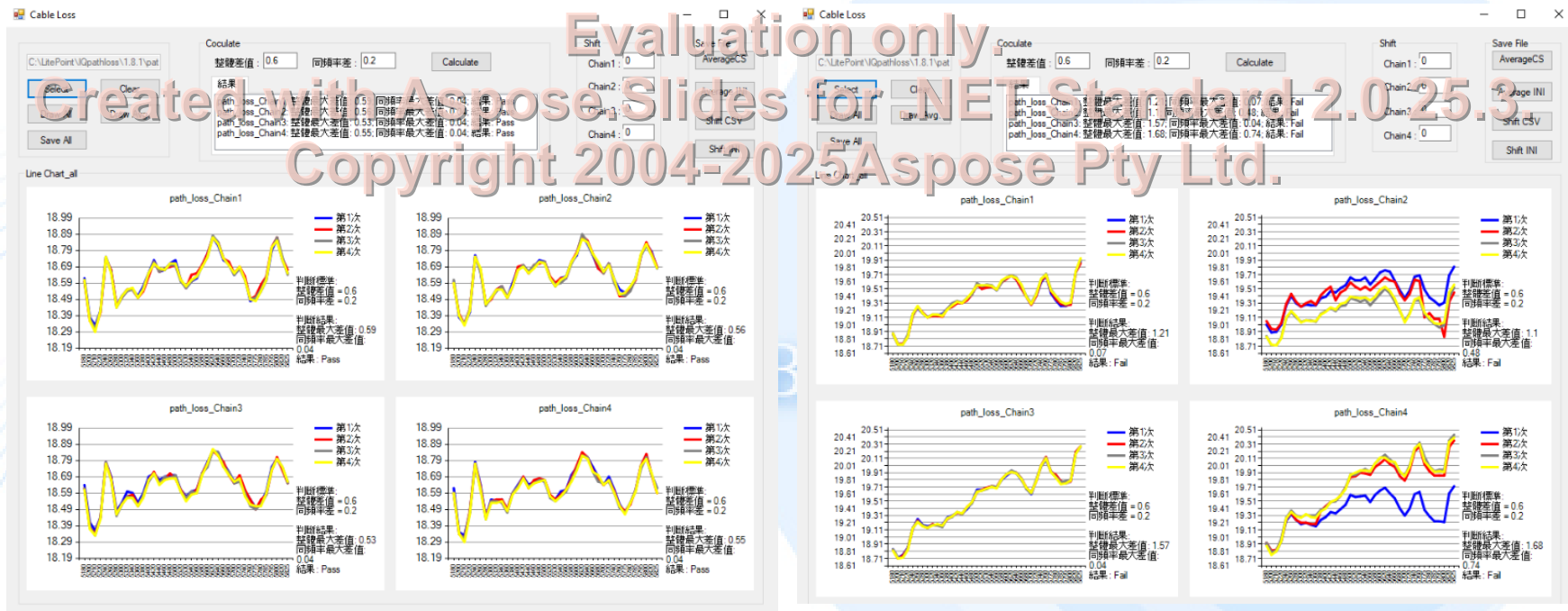
Step 7: Click select(1) → Link to **path\_loss** file(2) → Click Open(3).





Step 8: Cable loss result PASS/FAIL will be shown as the below:

- ▶ On the case FAIL, check again the connections then proceed cable loss again.
- ▶ On the case PASS, move to Step 9.

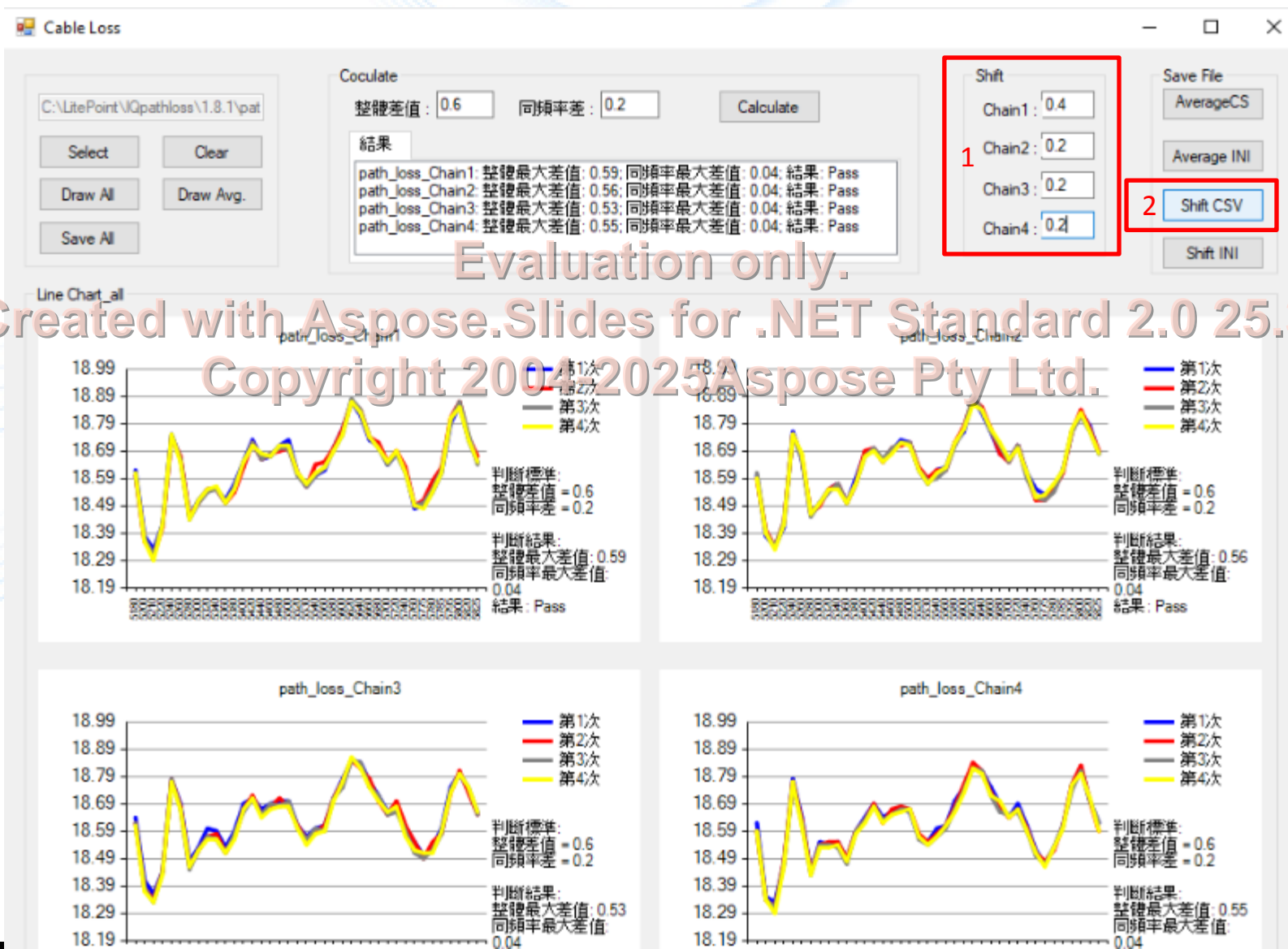


PASS

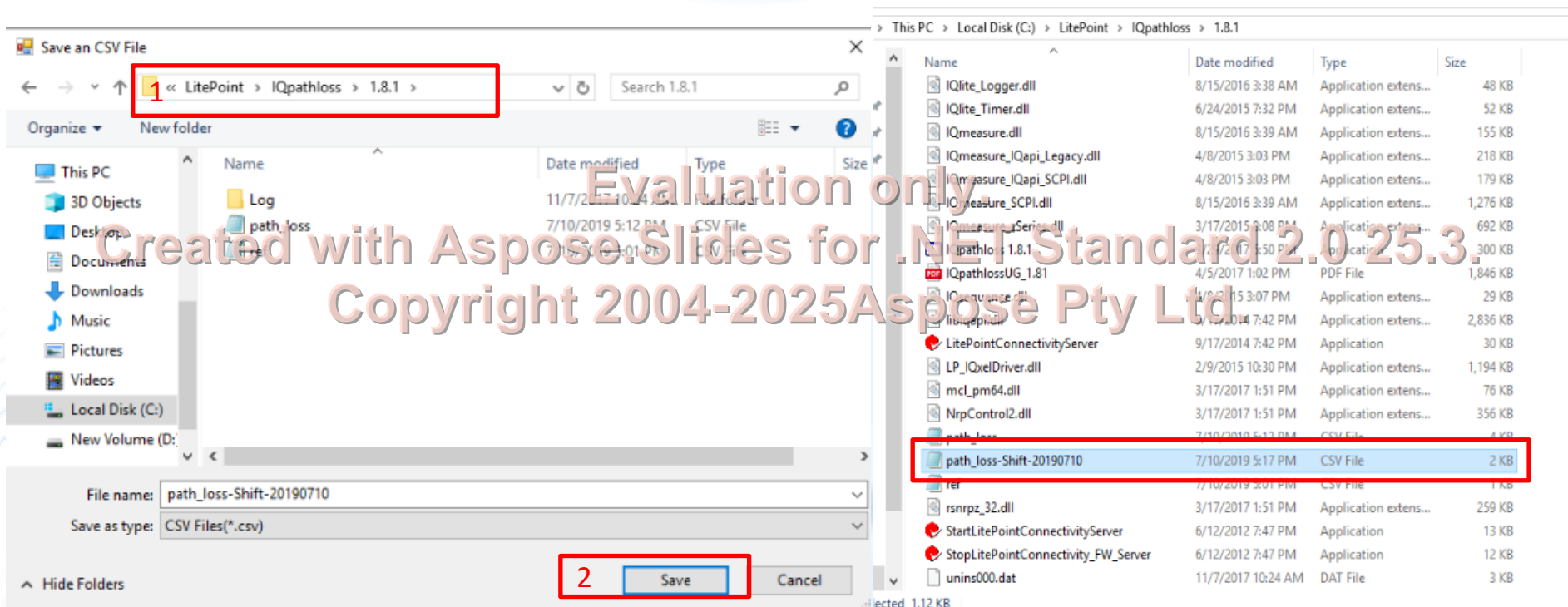
FAIL

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Step 9: Set Shift value(1) → Click Shift CSV(2).



Step 10: Link **path\_loss-Shift-yyyymmdd** file to the 'C:\LitePoint\Iqpathloss\1.8.1' (1)→ Save(2)  
**path\_loss-Shift-yyyymmdd** csv file is saved. Cable Loss Calibration is DONE.



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