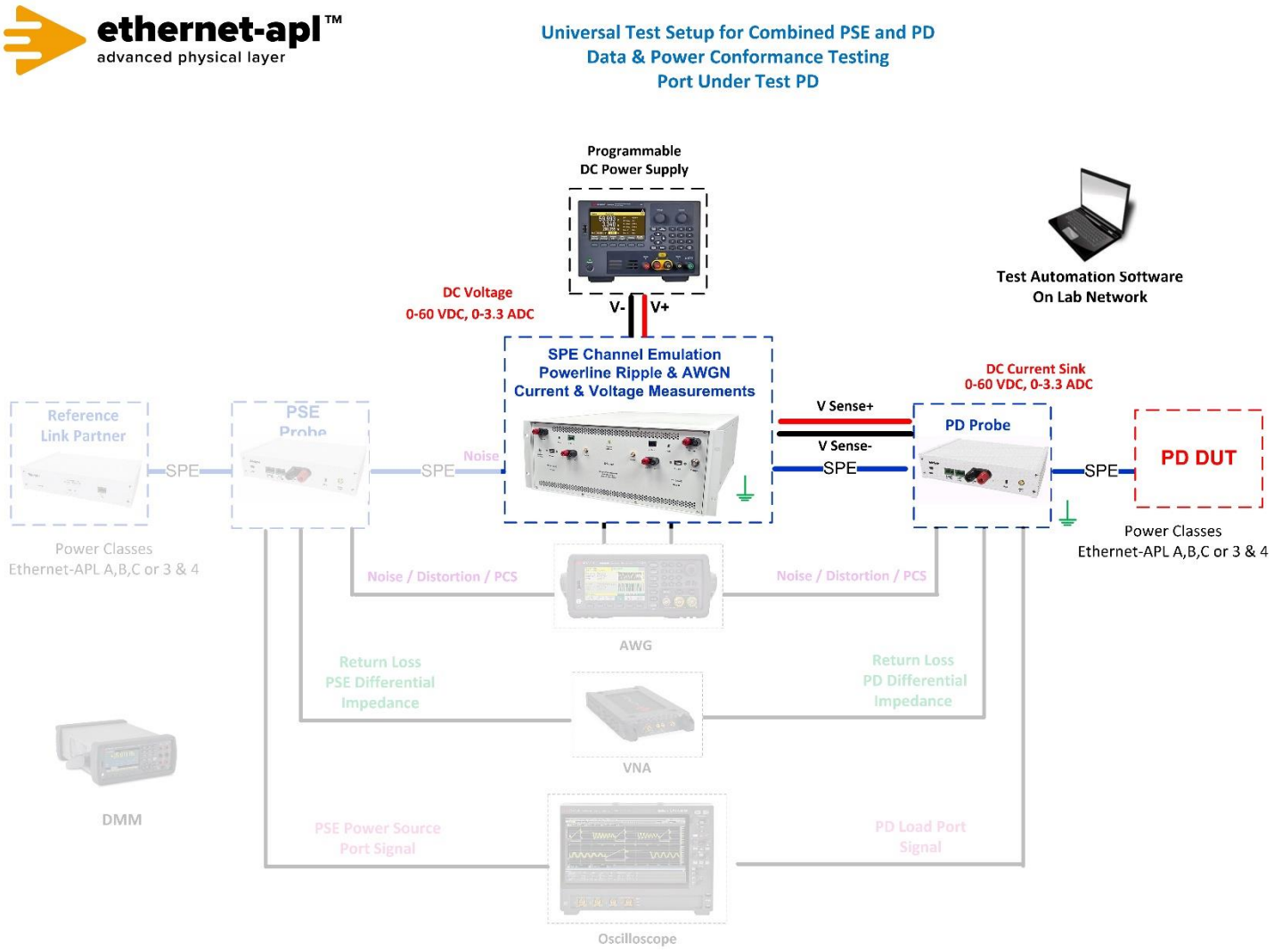
Test Type (Data or Power): Power
Test Name: TL.1.1 Minimum Current Draw

Purpose/Description: To verify that a Trunk Power Load port will draw the minimum required current during steady state operation if it implements a diode function. Minimum and Maximum Supply Voltage.

Required Test Equipment:

1. PD Probe
2. 4950 Channel Emulator (for current measurements)
3. Programmable DC Power Supply (to power the PD Load DUT)
4. Test Automation Software

Test Setup / Connection Diagram:



Device Under Test Setup:

- It is expected that all tests are performed with PHY communication abilities disabled. This is achieved by disabling Auto-Negotiation and setting the PHY to SLAVE mode. Regardless of the PHY state, each data line of the port under test shall be terminated with a 50 Ohm resistance behind a 1 µF series capacitor in the Telebyte Probe.
- Enter the Power Class for the Device Under Test (Class 3 or 4) into the test automation software.

Expected Results (Pass/Fail Criteria):

Spur Power Load Port will continuously draw the specified value of current during steady state. Class A and C IPL(min)=20mA

Step	Status	Description
4	PASS	The port utilizes a diode in the signal path and all measurements of I_{PL} are at least $I_{PL(MIN)}$ (≥ 40 mA)
4	FAIL	The port utilizes a diode in the signal path and at least one measurement of I_{PL} is less than $I_{PL(MIN)}$ (< 40 mA)
-	N/A	The port does not utilize a diode function in the signal path

Notes:

References:

[1] APL Port Profile Draft 1.2 Section 5.4
[2] Methods Annex – Disabling PHY