VNA S-Parameter Report

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VNA Measurement Configuration

VNA MEASUREMENT CONFIGURATION

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Instrument..................... Keysight N5247B PNA-X
Start Frequency................ 1.000 GHz
Stop Frequency................. 10.000 GHz
Frequency Span................. 9.000 GHz
Frequency Step................. 90.000 MHz
Number of Points............... 101
IF Bandwidth................... 10.0 kHz
Number of Averages............. 16
Power Level.................... -10.0 dBm
Calibration Type............... SOLT
Calibration Date............... 2026-01-20
Measurement Date............... 2026-01-26 20:00:44
Operator....................... Test Engineer
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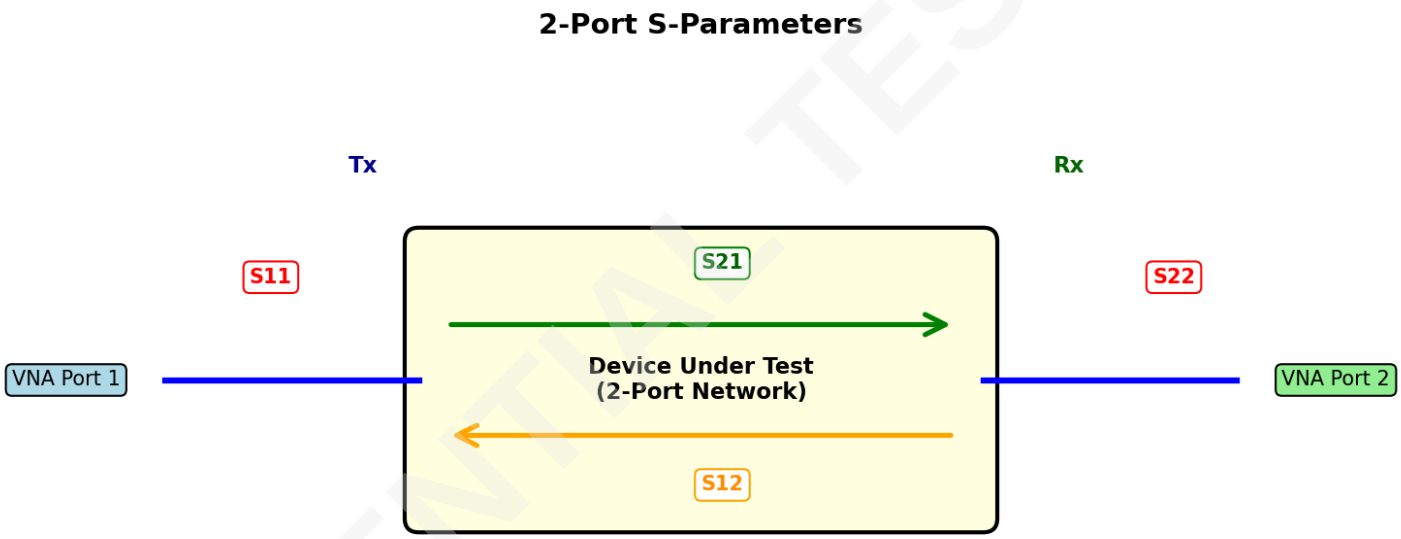
Notes:

Test measurement for demonstration purposes. Cable length approximately 1 cm.

S-Parameter Configuration: 2-Port Device

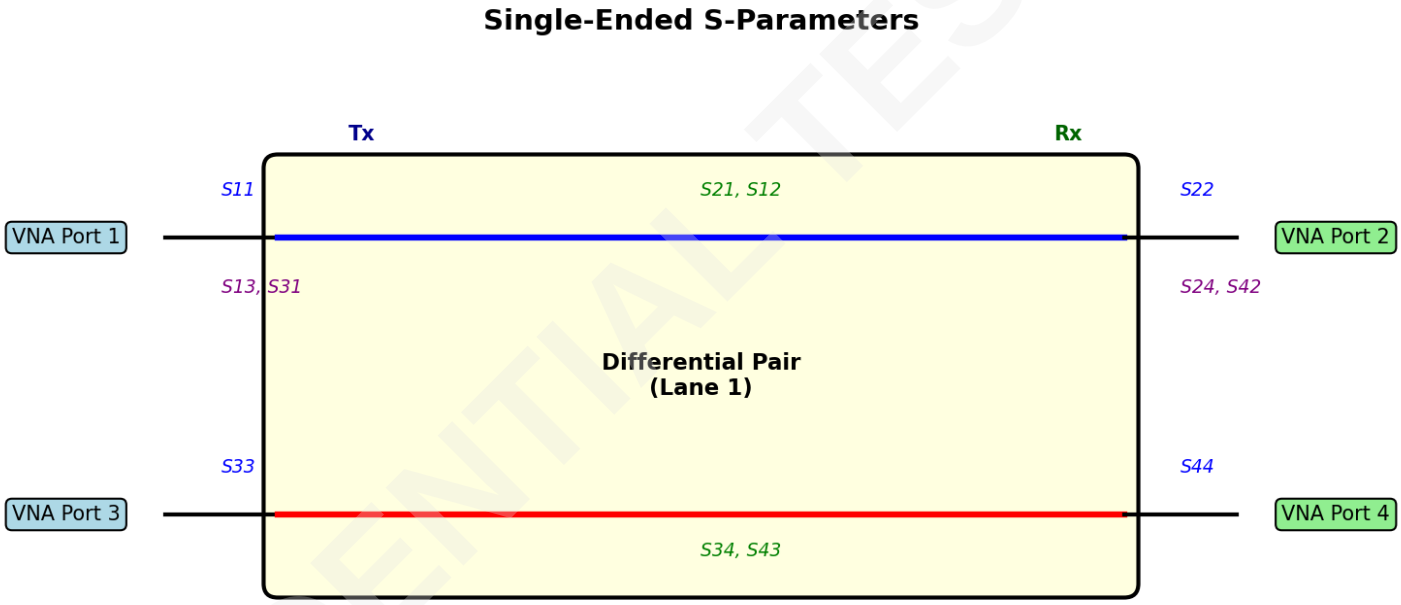


S11, S22: Input/Output Return Loss (Reflection)

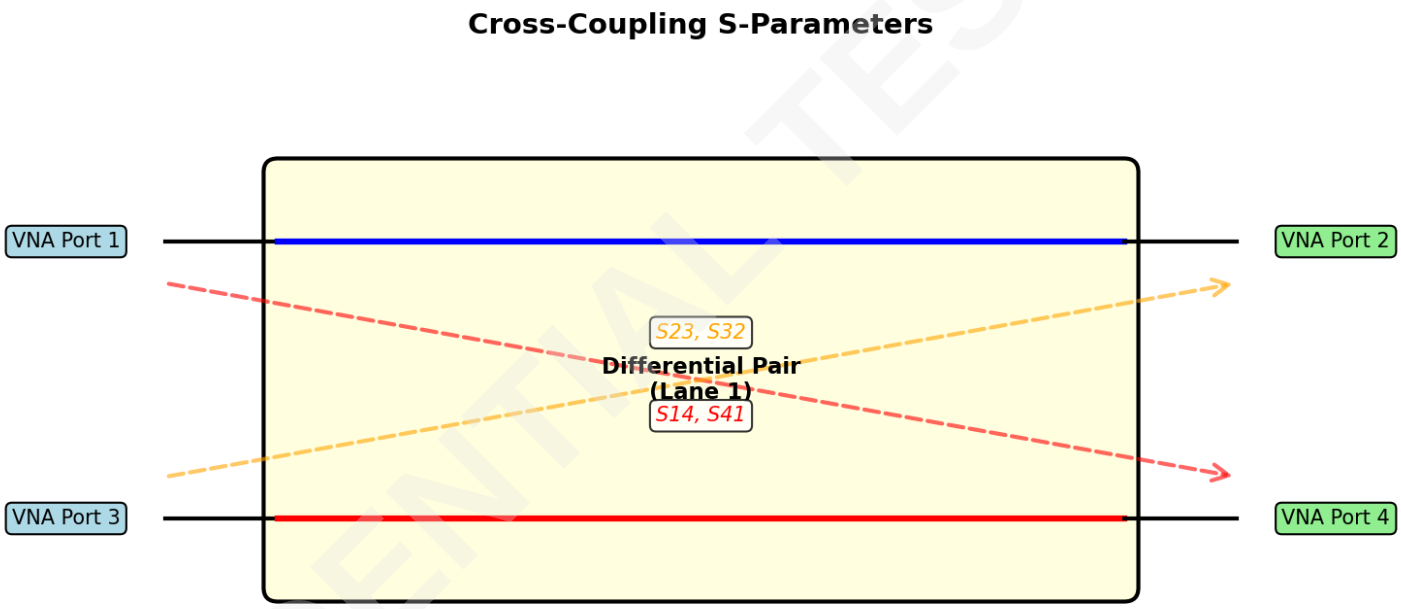
S21: Forward Gain/Loss | S12: Reverse Isolation

For passive reciprocal devices: S12 = S21

S-Parameter Configuration: Single-Ended

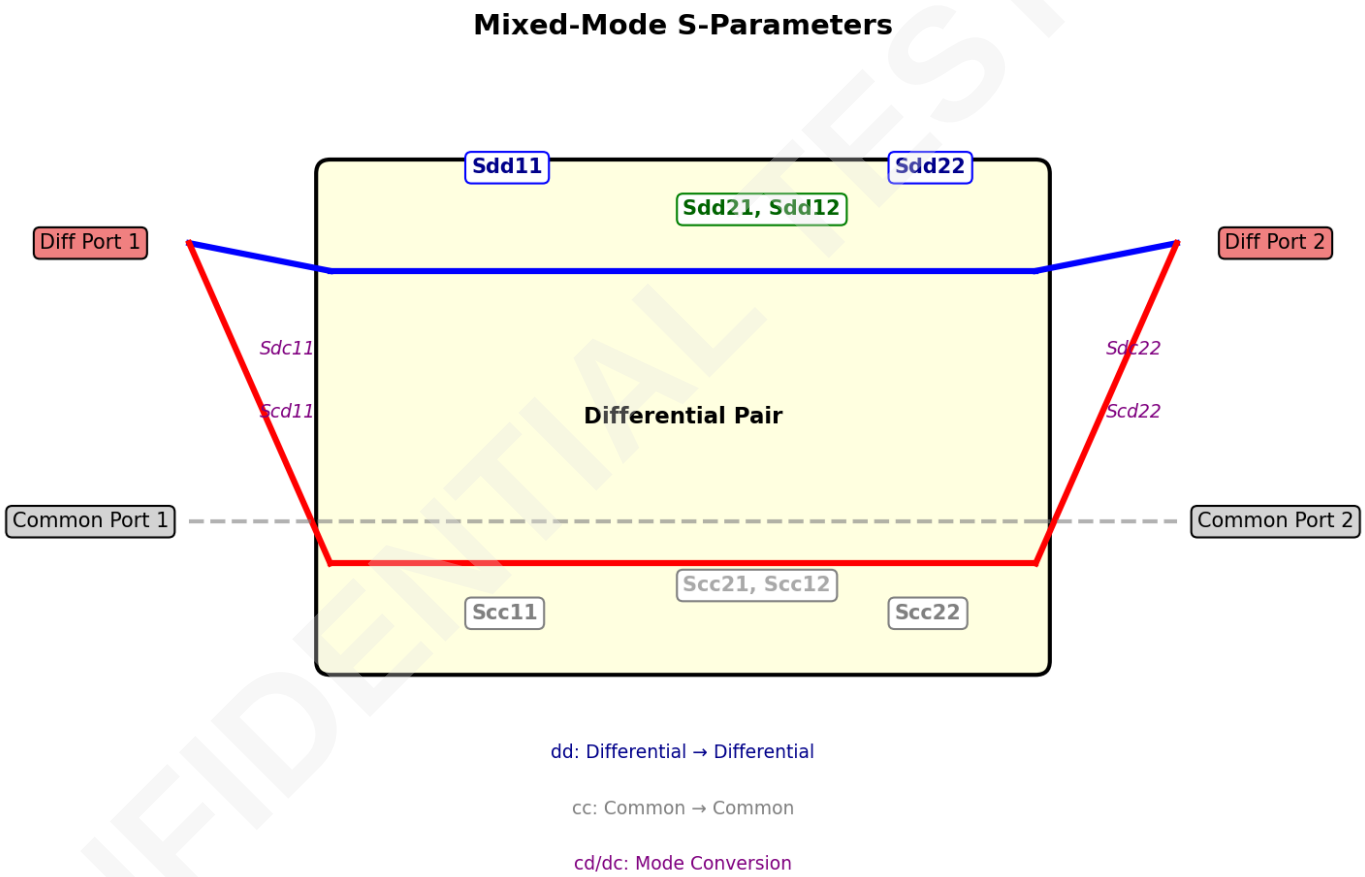


S-Parameter Configuration: Cross-Coupling



Cross-coupling between positive and negative lines

S-Parameter Configuration: Mixed-Mode



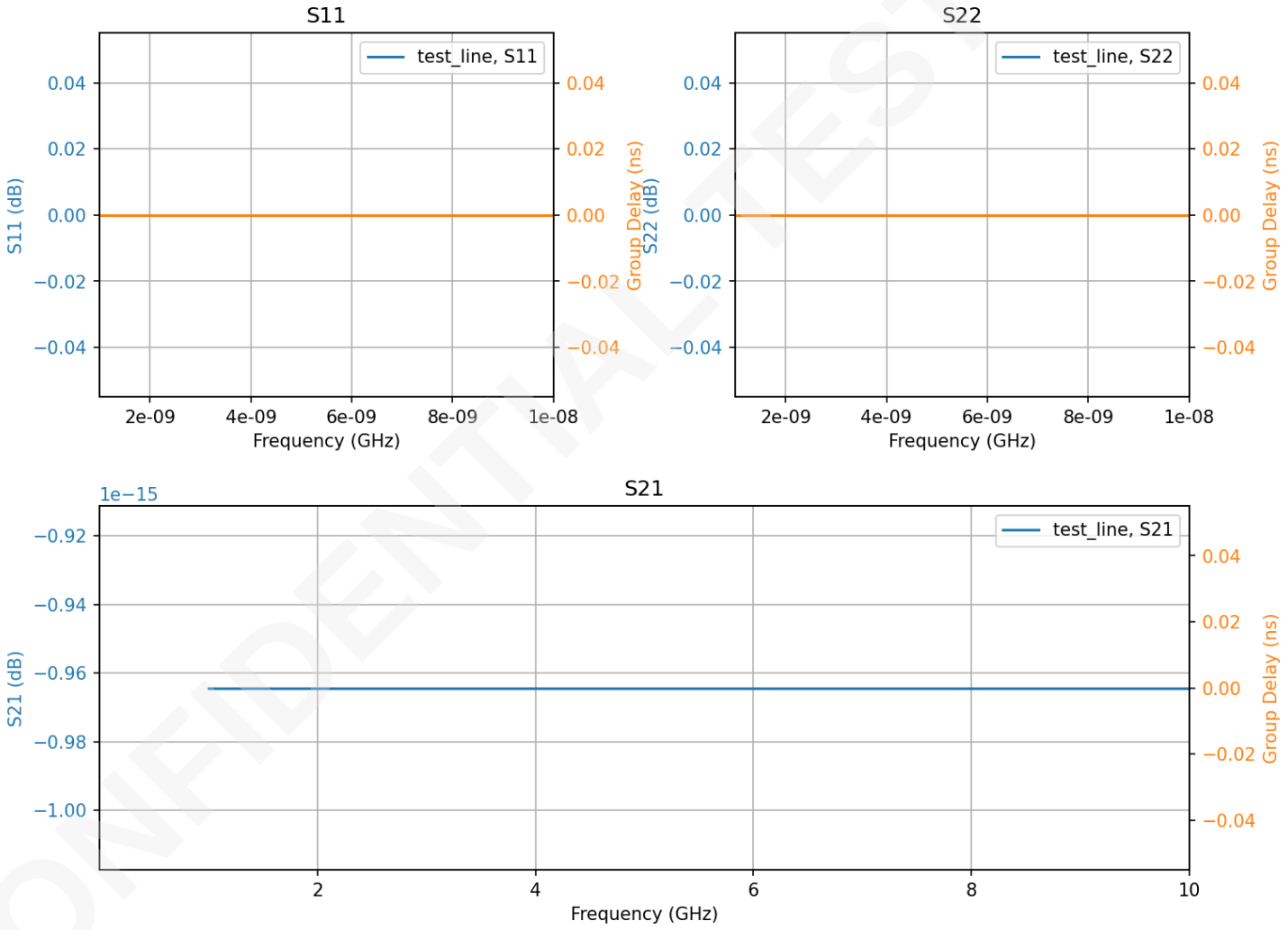
dd: Differential → Differential

cc: Common → Common

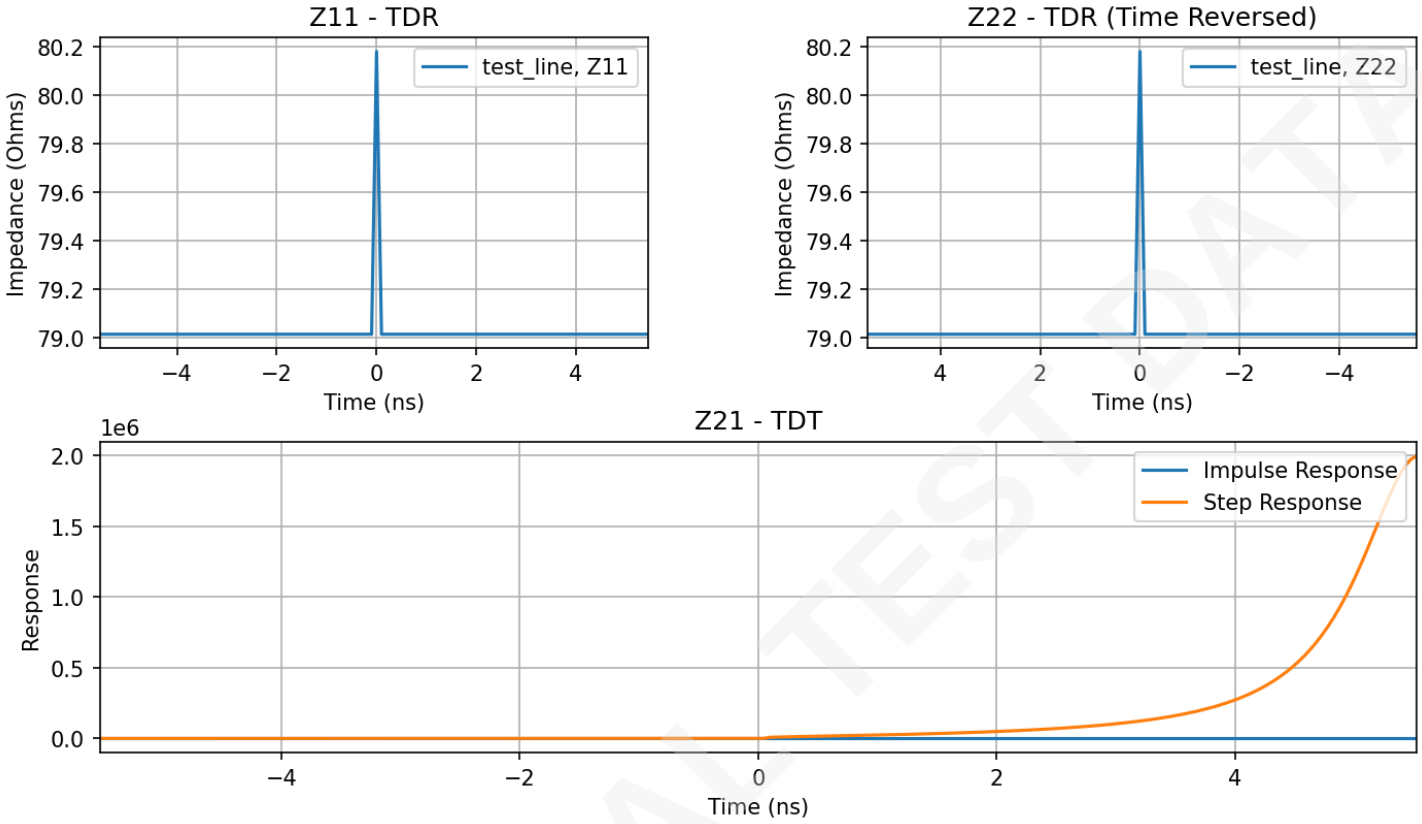
cd/dc: Mode Conversion

S-Parameters: DUT_1

DUT: DUT_1 - S-Parameters



DUT: DUT_1 - TDR/TDT

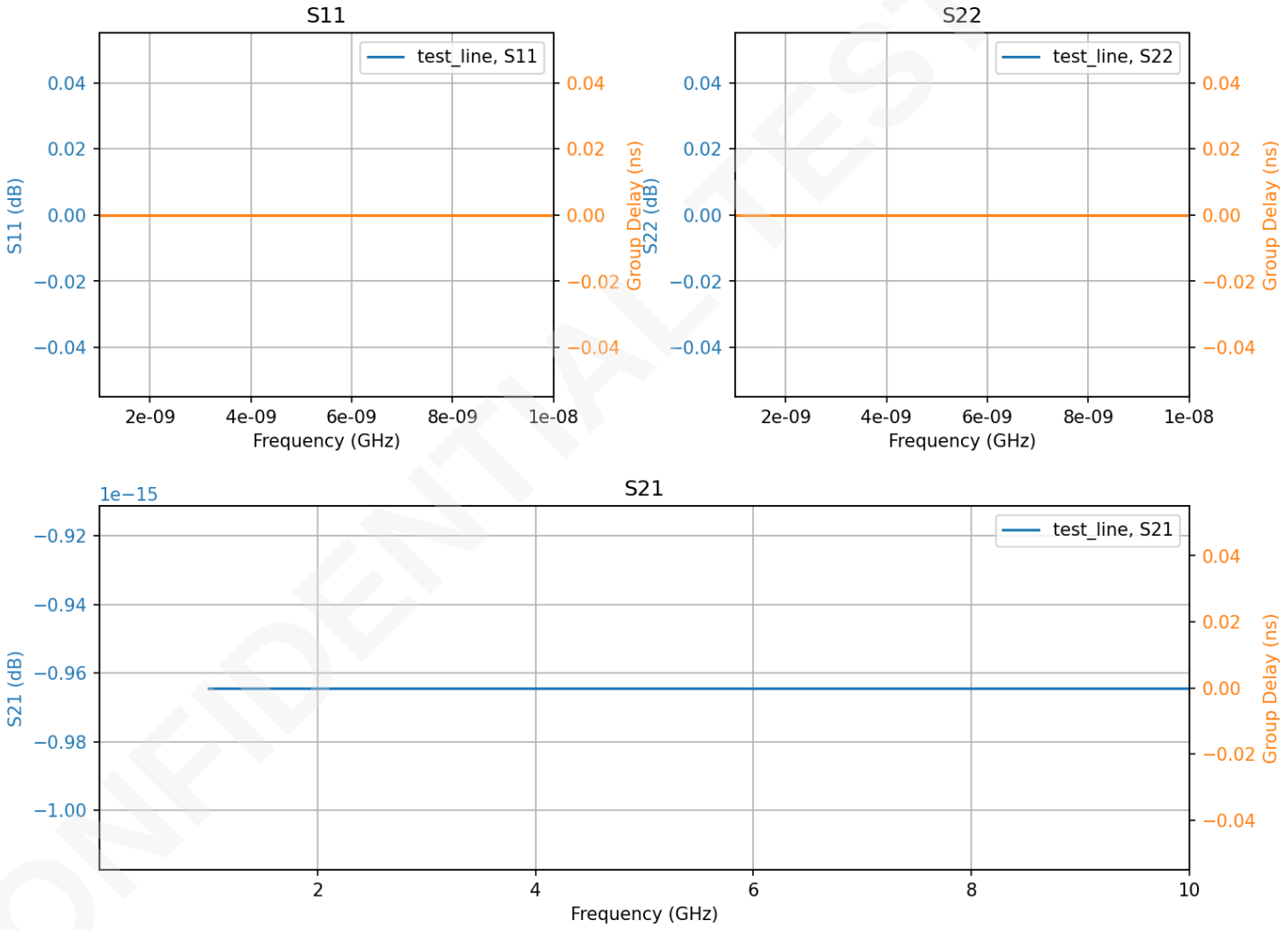


Impedance Metrics Summary

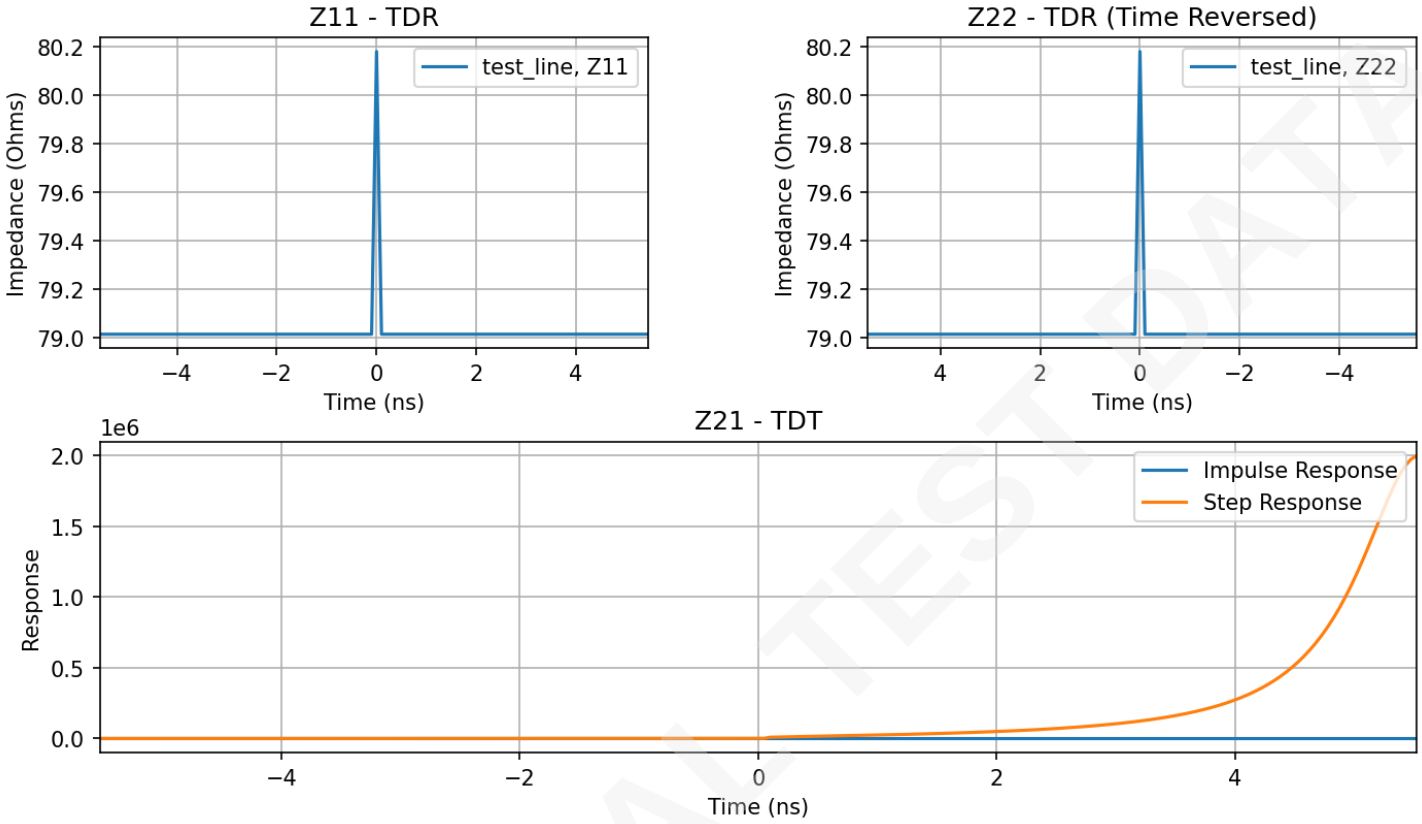
Parameter	Target (Ω)	Reading (Ω)	Margin (Ω)	Pass/Fail
Z11	50.00	10211.30	+10161.30	FAIL
Z22	50.00	10211.30	+10161.30	FAIL
Z21	50.00	10211.42	+10161.42	FAIL

S-Parameters: DUT_2

DUT: DUT_2 - S-Parameters



DUT: DUT_2 - TDR/TDT

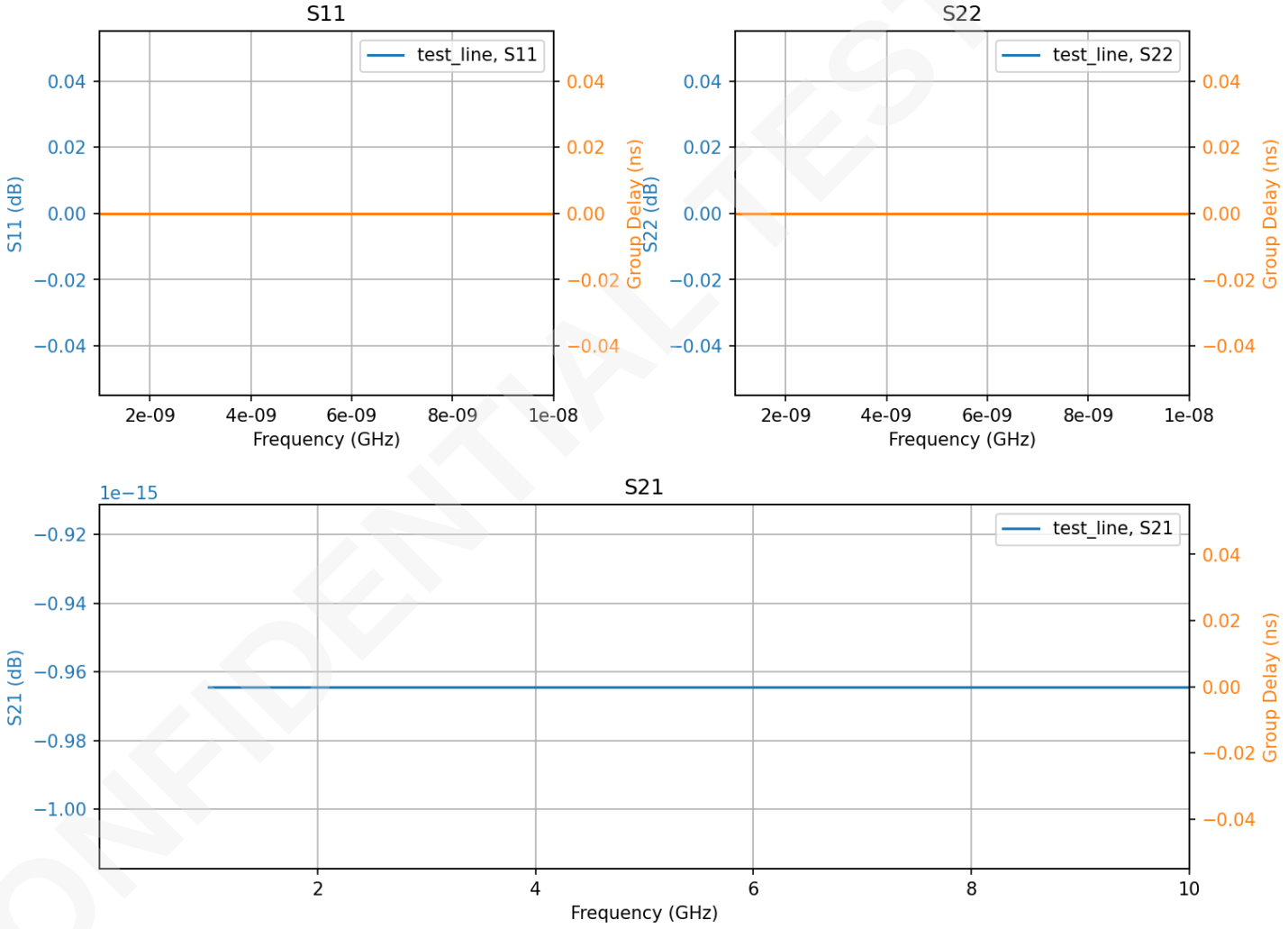


Impedance Metrics Summary

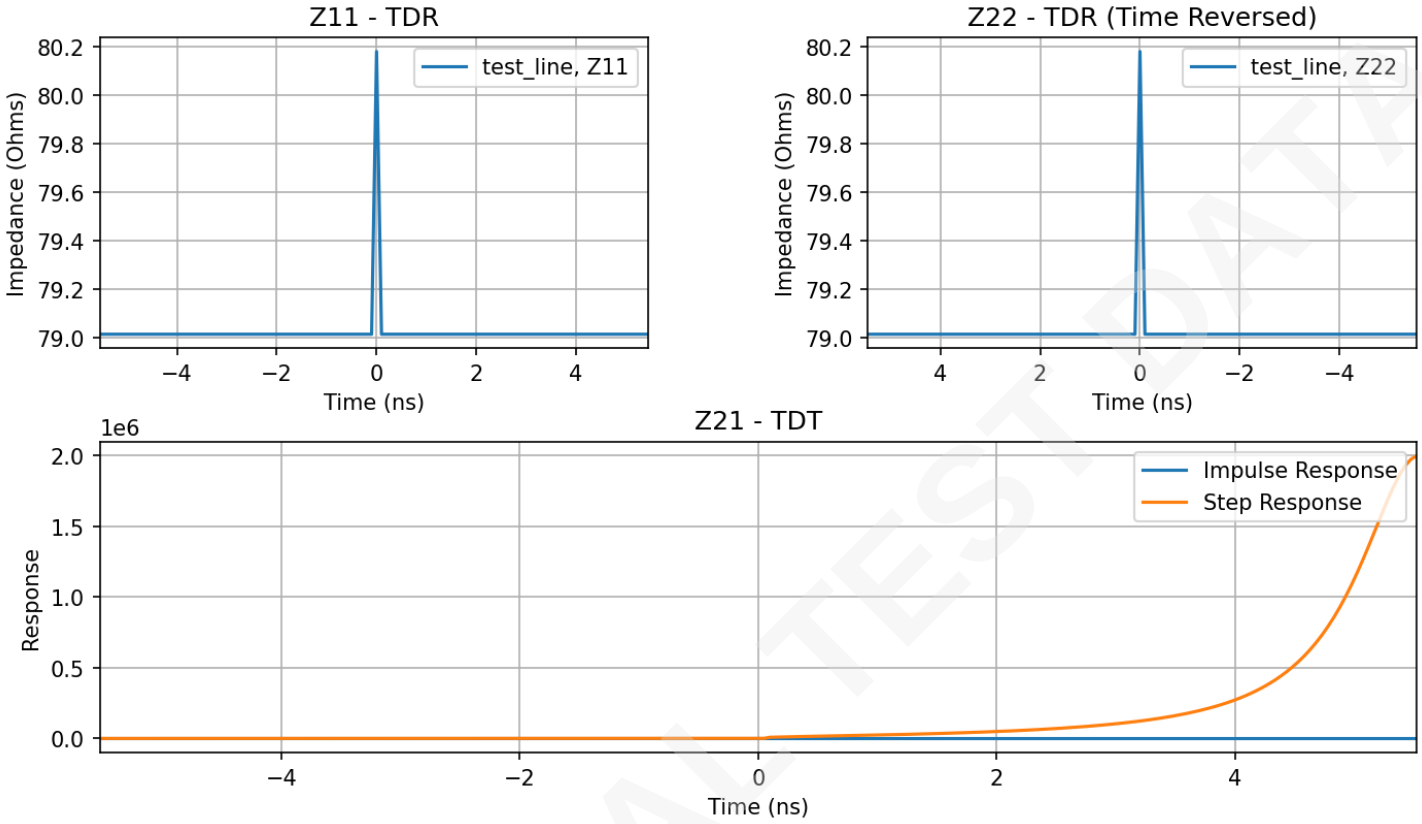
Parameter	Target (Ω)	Reading (Ω)	Margin (Ω)	Pass/Fail
Z11	50.00	10211.30	+10161.30	FAIL
Z22	50.00	10211.30	+10161.30	FAIL
Z21	50.00	10211.42	+10161.42	FAIL

S-Parameters: DUT_3

DUT: DUT_3 - S-Parameters



DUT: DUT_3 - TDR/TDT



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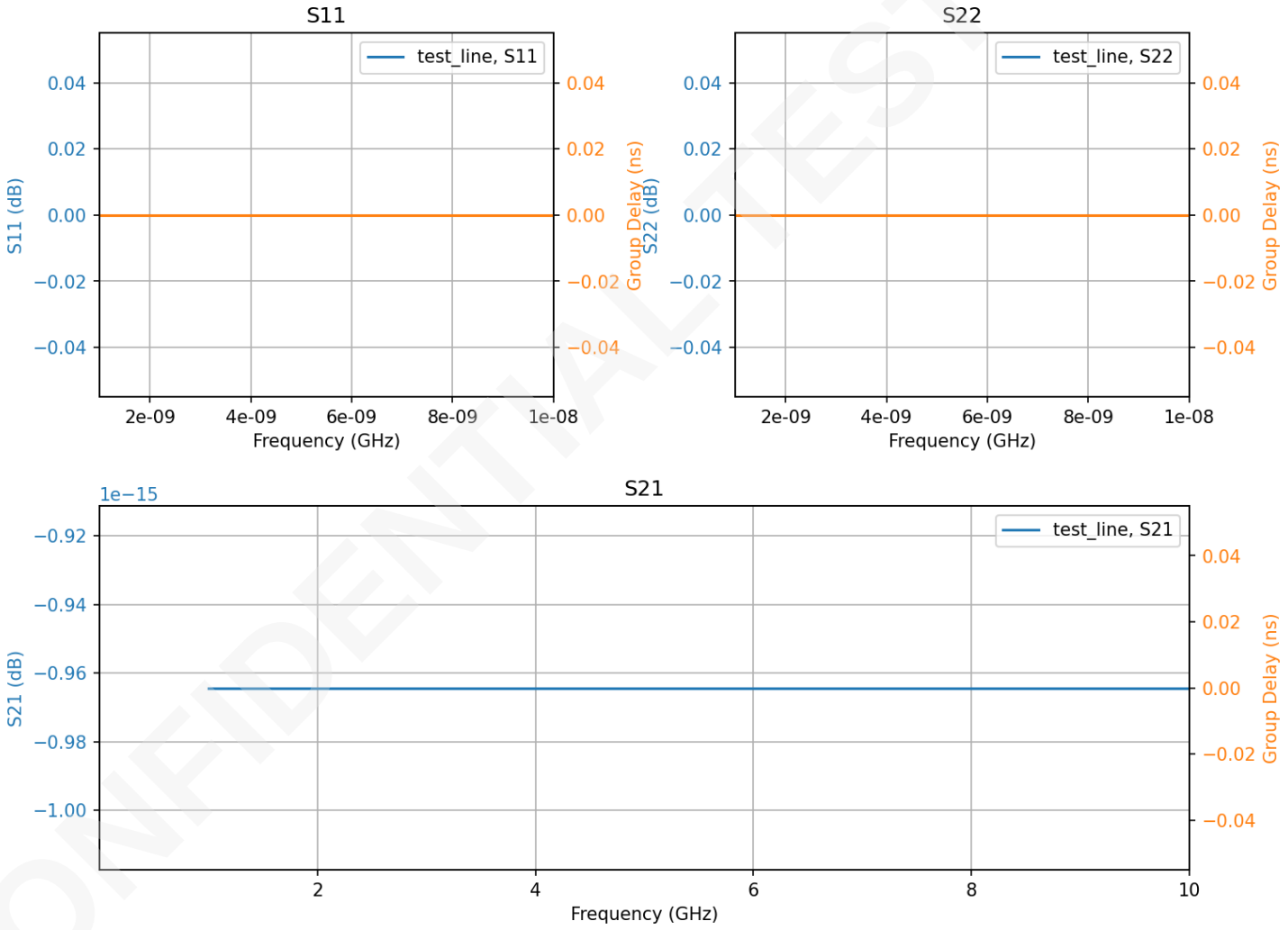
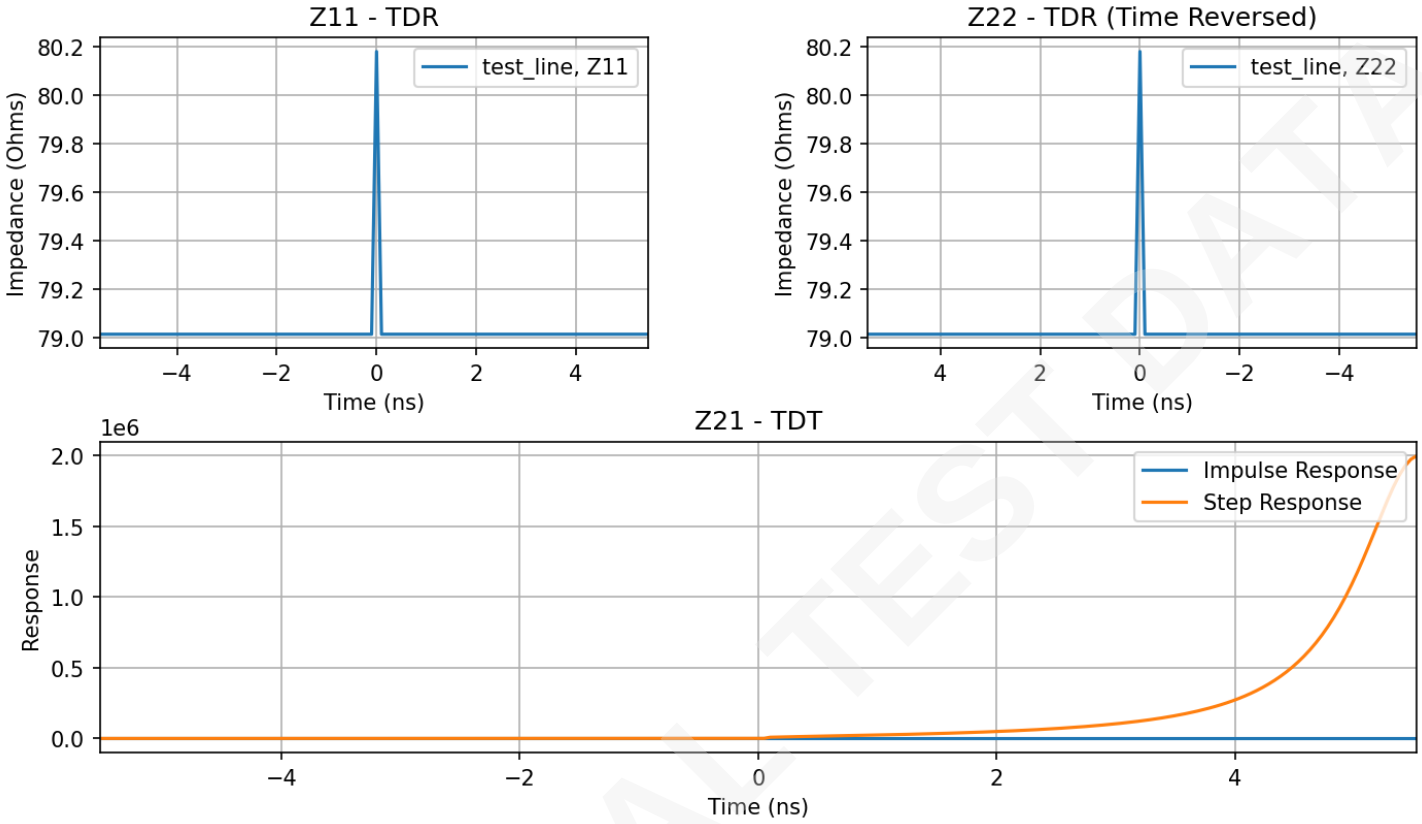
Z11	50.00	10211.30	+10161.30	FAIL
Z22	50.00	10211.30	+10161.30	FAIL
Z21	50.00	10211.42	+10161.42	FAIL

S-Parameters: DUT_4

DUT: DUT_4 - S-Parameters



DUT: DUT_4 - TDR/TDT



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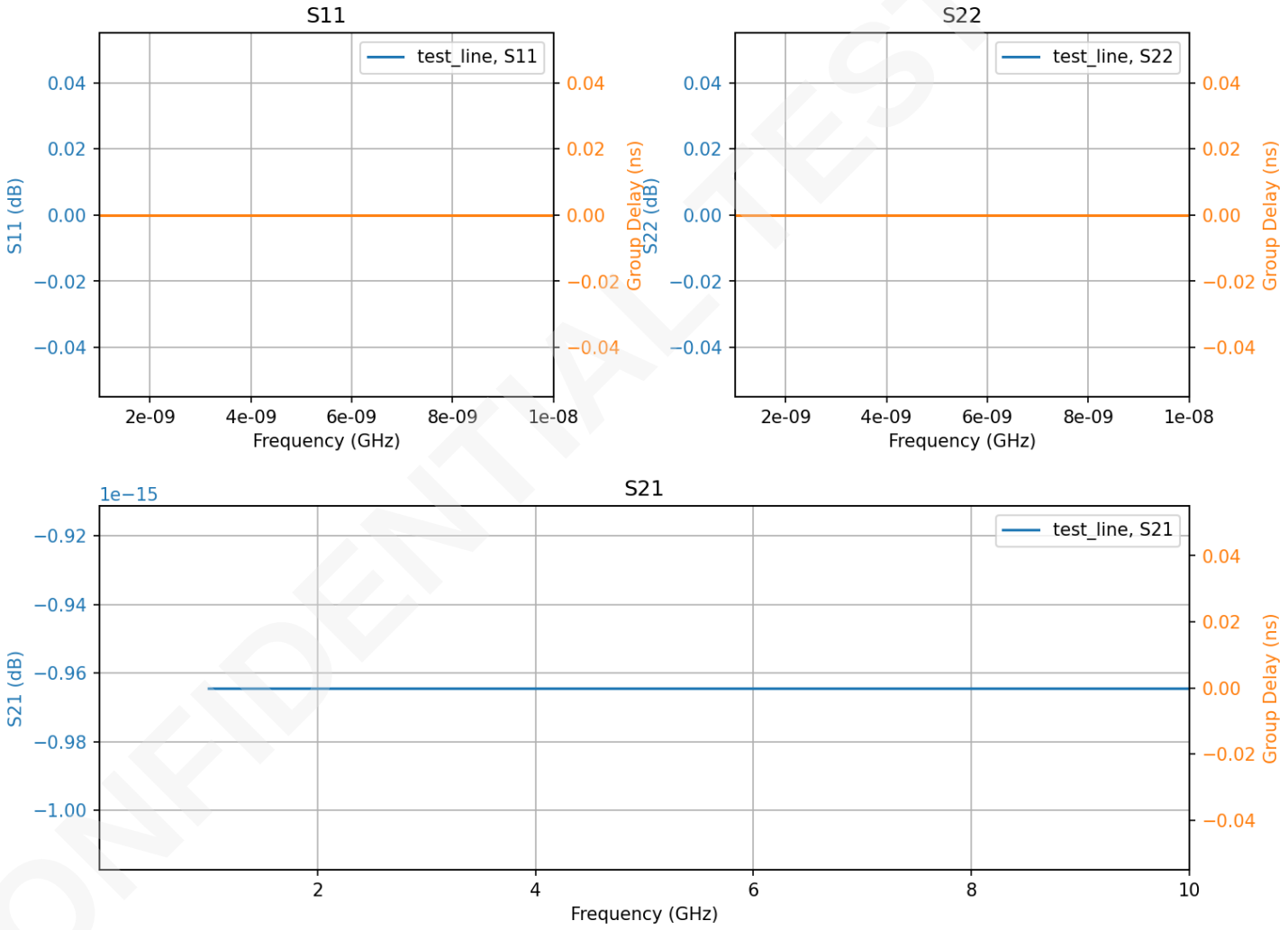
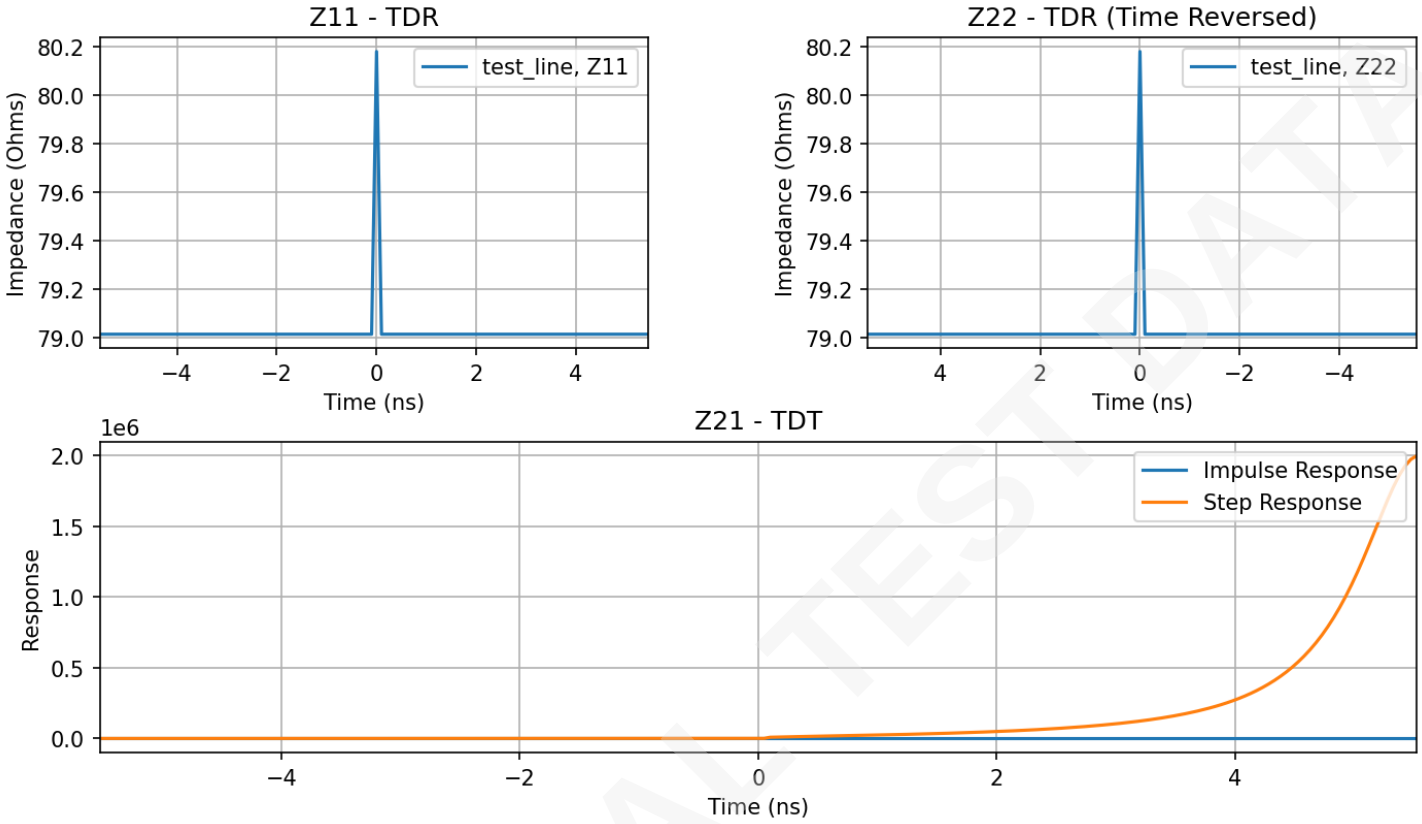
Z11	50.00	10211.30	+10161.30	FAIL
Z22	50.00	10211.30	+10161.30	FAIL
Z21	50.00	10211.42	+10161.42	FAIL

S-Parameters: DUT_5

DUT: DUT_5 - S-Parameters



DUT: DUT_5 - TDR/TDT



Impedance Metrics Summary

Parameter	Target (Ω)	Reading (Ω)	Margin (Ω)	Pass/Fail
Z11	50.00	10211.30	+10161.30	FAIL
Z22	50.00	10211.30	+10161.30	FAIL
Z21	50.00	10211.42	+10161.42	FAIL