



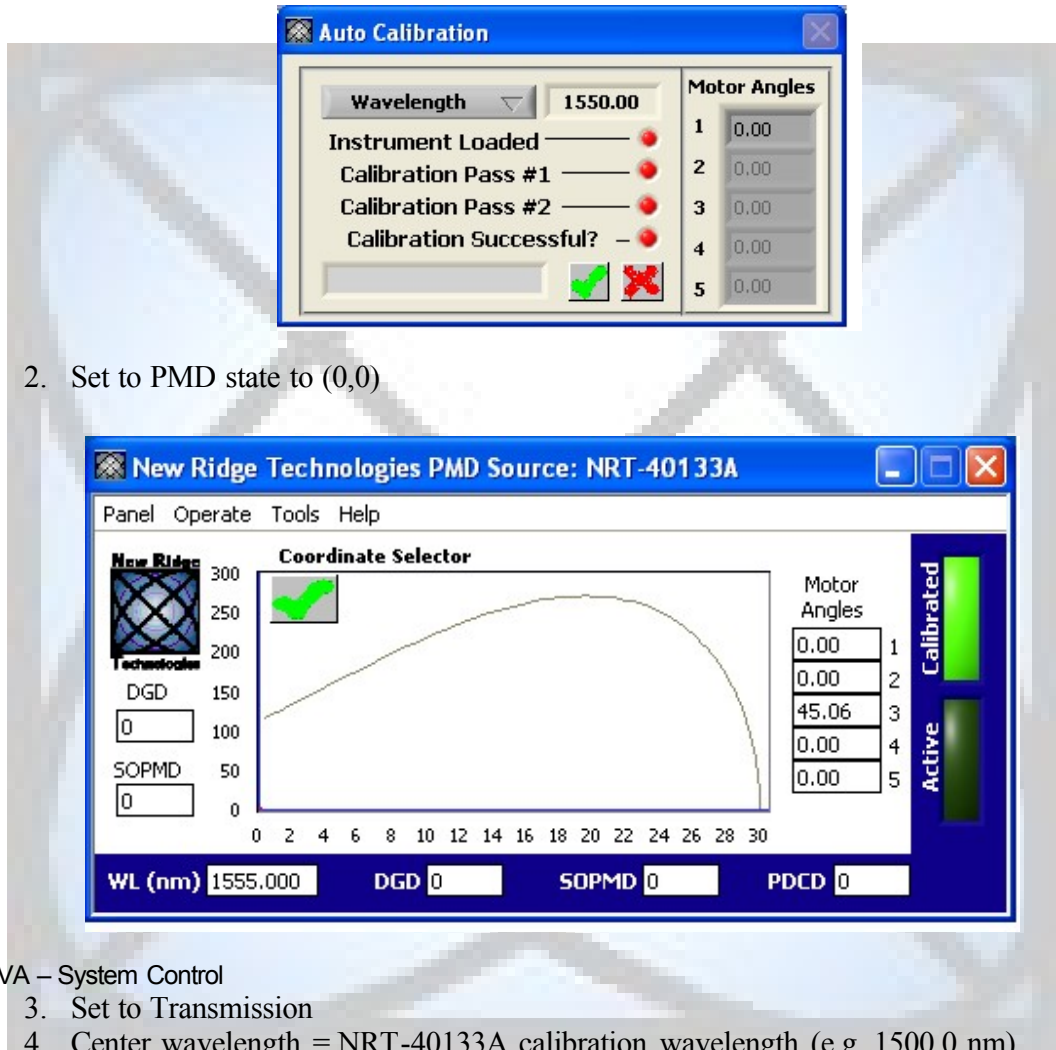
Tech Note: Measurement of New Ridge Technologies' PMD Sources with Luna OVA



OVA set up to measure NRT-40133A DGD states

NRT-40133A

1. Calibrate at desired wavelength (e.g. 1550.0 nm)



2. Set to PMD state to (0,0)

OVA – System Control

3. Set to Transmission
4. Center wavelength = NRT-40133A calibration wavelength (e.g. 1500.0 nm)
5. Wavelength range = 20.63 nm
6. Set to Broadband and click to find DUT length
7. Enable Averages ~10
8. Scan OVA



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System Control

Type of Measurement: Transmission
Center Wavelength (nm): 1550.00
Wavelength Range (nm): 20.63
Scan Range (nm): 1539.55 - 1560.59
DUT Length Find Method: Broadband
Find Length of DUT (m): 12.406

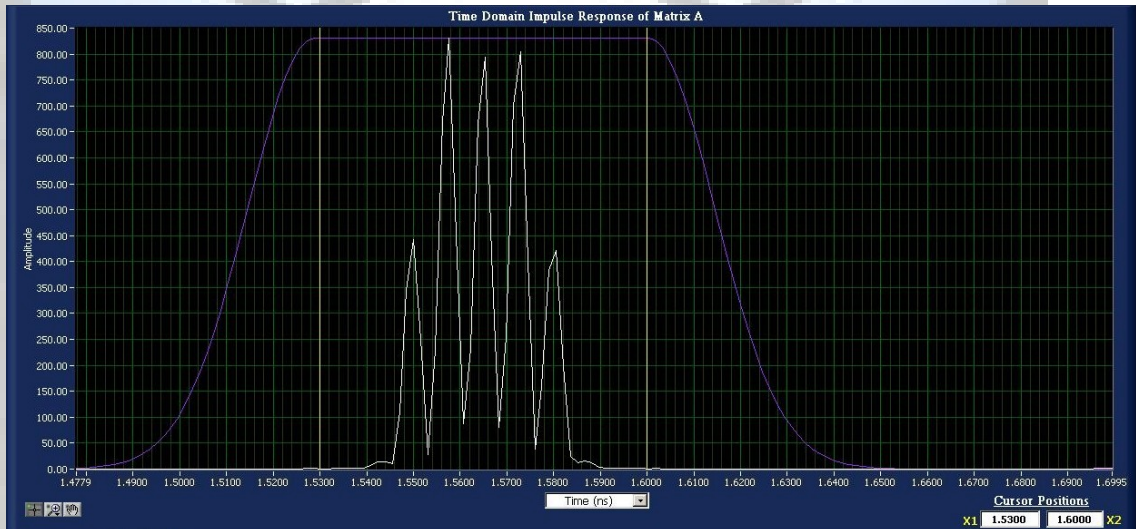
Continuous Mode
 Enable Averaging # 10

Scan

OVA – Data Processing

9. Set Filter Res BW to 10pm

10. In Time domain window set cursor x1 to 1.530 and cursor x2 to 1.600



11. Retain settings

12. Accept

Window Parameters

Matrix to View/Window: A
Retain Settings:
Sigma (ns): 0.020
Window Res BW (pm): 77.58

Accept Cancel

OVA – System Control

13. Reset wavelength range to 5.11 nm (~4 FSRs)

The OVA is now ready to scan NRT-40133A states.

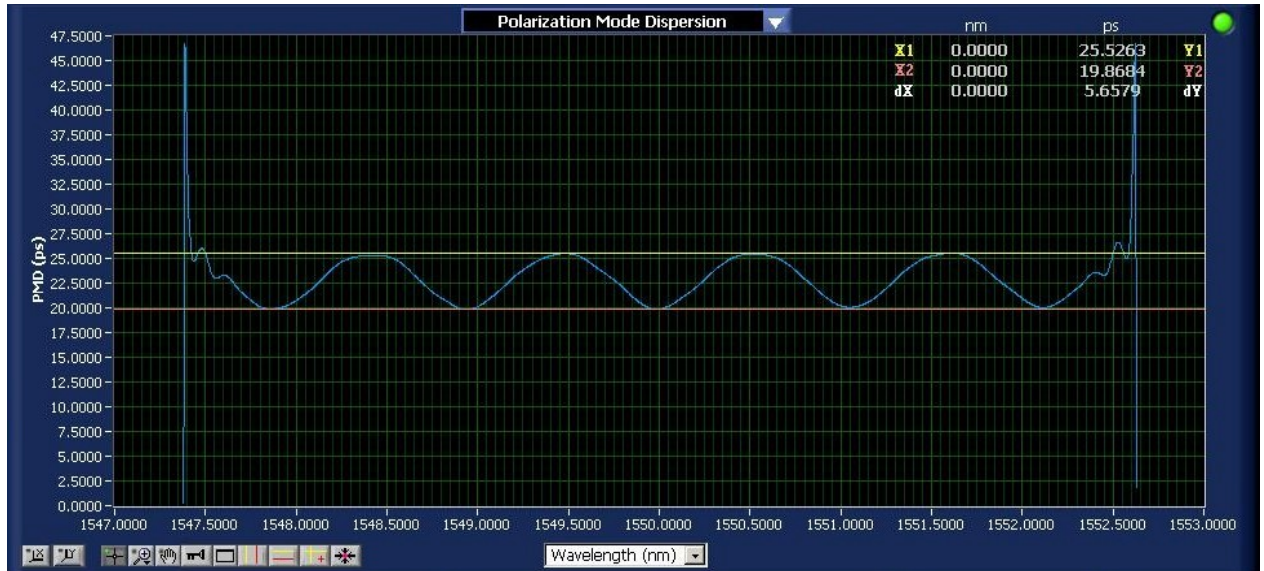


Tech Note: Measurement of New Ridge Technologies' PMD Sources with Luna OVA



Comparison of NRT-40133A DGD state with of OVA Measurement

Set the NRT-40133A to the desired state, then scan with the OVA. After scanning the PMD state set Y markers on OVA and measure the DGD max and min across the scan.

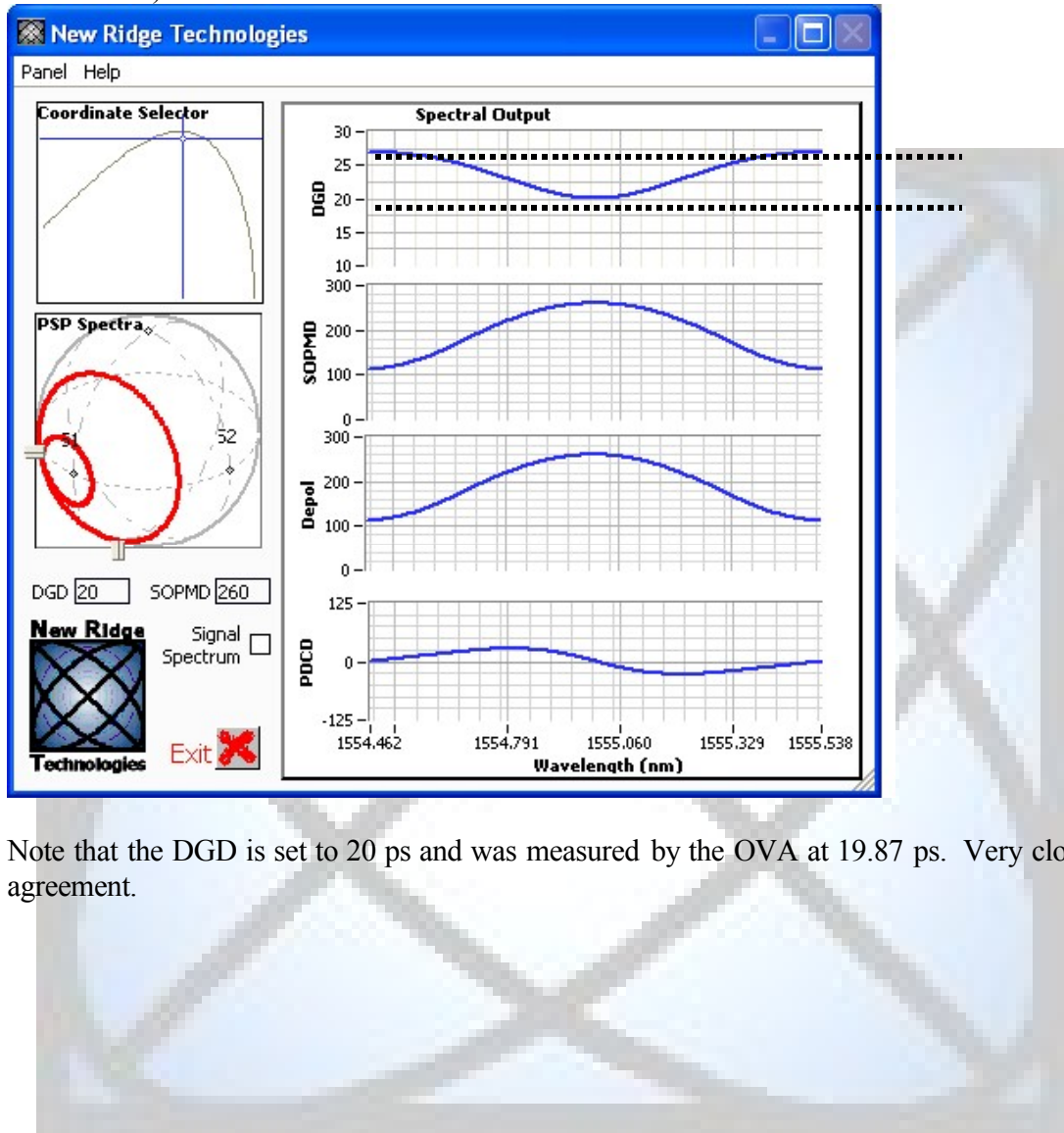




Tech Note: Measurement of New Ridge Technologies' PMD Sources with Luna OVA



This should match the DGD spectrum on the PMDS (PMDS → Tools → Spectral and PSP Viewer).



Note that the DGD is set to 20 ps and was measured by the OVA at 19.87 ps. Very close agreement.

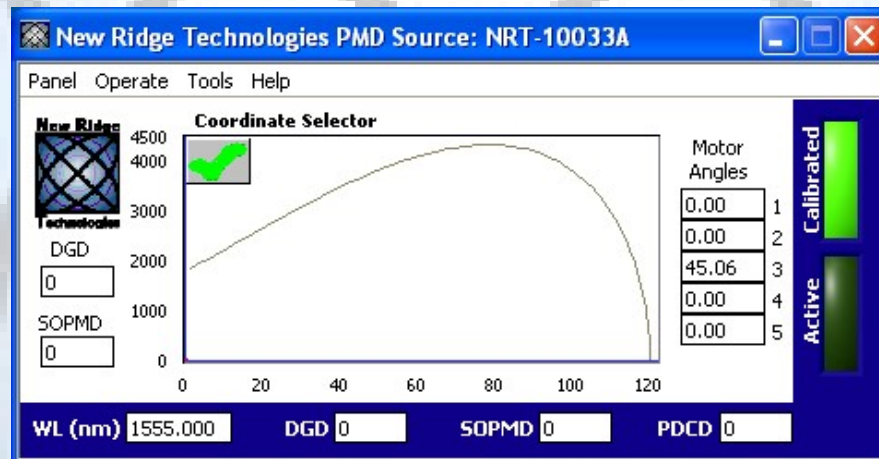


OVA set up to measure NRT-10033A DGD states

1. Calibrate at desired wavelength (e.g. 1550.0 nm)



2. Set to PMD state to (0,0).
OVA – System Control



3. Set to Transmission
4. Center wavelength = NRT-10033A calibration wavelength (e.g. 1500.0 nm)
5. Wavelength range = 20.63 nm
6. Set to Broadband and click to find DUT length
7. Enable Averages ~10
8. Scan OVA



Tech Note: Measurement of New Ridge Technologies' PMD Sources with Luna OVA



System Control

Type of Measurement: Transmission

Center Wavelength (nm): 1550.00

Wavelength Range (nm): 20.63

Scan Range (nm): 1539.55 - 1560.59

DUT Length Find Method: Broadband

Find Length of DUT (m): 12.406

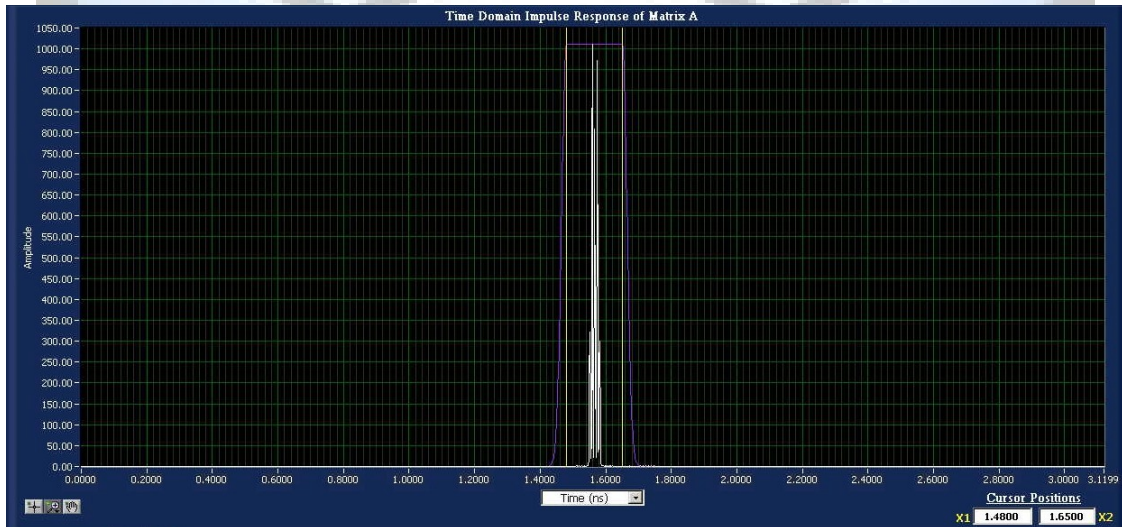
Continuous Mode

Enable Averaging # 10

Scan

OVA – Data Processing

9. Set Filter Res BW to 10pm
10. In Time domain window set cursor x1 to 1.48 and cursor x2 to 1.65



11. Retain settings
12. Accept

Window Parameters

Matrix to View/Window: A

Retain Settings:

Sigma (ns): 0.020

Window Res BW (pm): 77.58

Accept Cancel

OVA – System Control

13. Reset wavelength range to 2.55 nm



Tech Note: Measurement of New Ridge Technologies' PMD Sources with Luna OVA



The OVA is now ready to scan PMDS states. After scanning a PMD state set Y markers on OVA and measure the DGD max and min across the scan. This should match the DGD spectrum on the PMDS (PMDS → Tools → Spectral and PSP Viewer), as shown with the NRT-40133A example above.

