

FINAL INSPECTION REPORT 1x3 Wavelength Combiner / Splitter (WDM)

Item #: RGB50HF SN: A000162 Center Wavelength
Blue Port: 488 nm

Green Port: 561 nm
Red Port: 640 nm
Maximum Optical Power^a

With Connectors or Bare Fiber: 50 mW

Spliced: 100 mW

Fiber Type: Nufern 460-HP

Test Data at Center Wavelength ^b						
Port Jacket Color		Blue	Green	Red		
Wa	velength	488 nm	561 nm	640 nm		
Transmission ^c		97.72%	100.00%	97.95%		
Insertion Loss ^d		0.10 dB	0.00 dB	0.09 dB		
Isolation ^e	White Port	N/A	25.6 dB	>50.0 dB		
	Red Port	22.9 dB	N/A	25.4 dB		
	Blue Port	22.2 dB	26,4 dB	N/A		

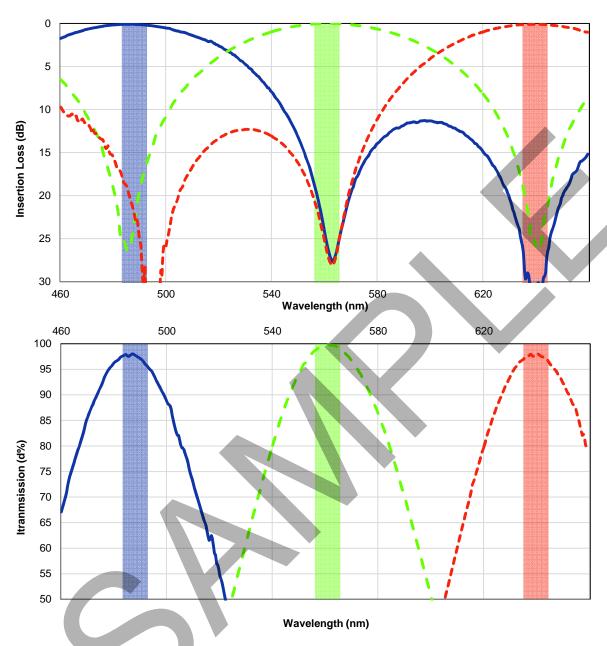
Test Data over Bandwidth ^b						
Bandwidth		483-493 nm	556-566 nm	635-645 nm		
Transmission ^c		95.3%	98.6%	96.4%		
Insertion Loss ^d		0.21 dB	0.06 dB	0.16 dB		
Isolation ^e	White Port	N/A	16.12 dB	17.62 dB		
	Red Port	18.67 dB	N/A	20.49 dB		
	Blue Port	25.81 dB	18.68 dB	N/A		

a. Specifies the maximum power allowed through the component. Performance and reliability under high power conditions must be determined within the user's setup.

- c. Calculated from measured insertion loss data below.
- d. Insertion loss is the ratio of the input power to the output power for each port of the wavelength combiner / splitter (WDM).
- e. Isolation represents the minimum crosstalk between ports.

Verified	by:	

b. All values are measured at room temperature without connectors.



This wavelength combiner / splitter (WDM) operation is only guaranteed over the specified bandwidth as defined by the colored regions above. Thorlabs displays a wider wavelength range to provide insight into how this particular device would perform if used outside its guaranteed operating range. The out-of-band performance can vary from device to device.