

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

Item #: RNN50HA SN: A000755 Center Wavelength

Red Port: 642 nm Green Port: 785 nm Blue Port: 852 nm Maximum Optical Power<sup>a</sup>

With Connectors or Bare Fiber: 300 mW

Spliced: 0.5 W Fiber Type:

Test Data at Center Wavelength <sup>b</sup>						
Port Jacket Color		Red	Green	Blue		
Wavelength		642 nm	785 nm	852 nm		
Transmission <sup>c</sup>		95.50%	92.68%	99.77%		
Insertion Loss <sup>d</sup>		0.20 dB	0.33 dB	0.01 dB		
Isolation <sup>e</sup>	White Port	N/A	27.6 dB	29.8 dB		
	Red Port	29.0 dB	N/A	29.5 dB		
	Blue Port	22.9 dB	19.1 dB	N/A		

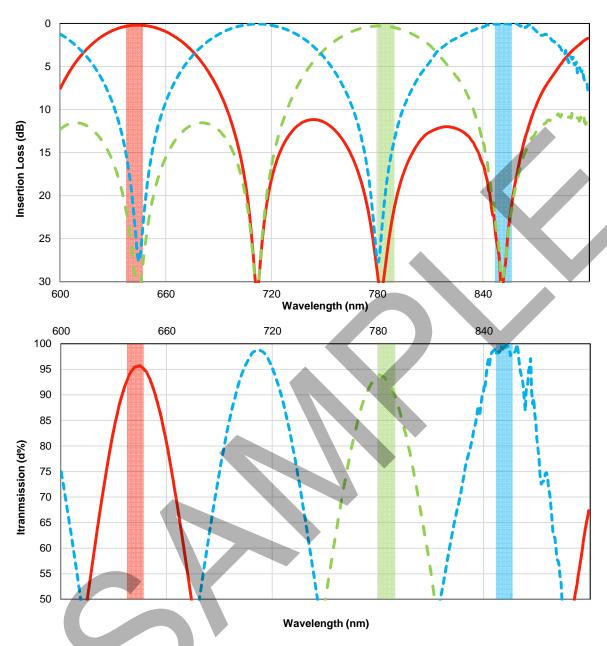
Test Data over Bandwidth <sup>b</sup>						
Bandwidth		637-647 nm	780-790 nm	847-857 nm		
Transmission <sup>c</sup>		92.7%	89.7%	98.0%		
Insertion Loss <sup>d</sup>		0.33 dB	0.47 dB	0.09 dB		
Isolation <sup>e</sup>	White Port	N/A	21.66 dB	15.12 dB		
	Red Port	21.32 dB	N/A	13.44 dB		
	Blue Port	20.98 dB	21.48 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.