## **THORLABS** FINAL INSPECTION REPORT Description: 2-Channel Wavelength Combiner

Item #: RB32F1 SN: T006502

## Wavelengths:

Channel 1: 473 nm Channel 2: 633 nm

Bandwidth: ±5 nm Max Power Level: 50 mW Fiber Type: 460HP

Combiner Test Data at Target Wavelength <sup>a</sup>		
	Channel 1	Channel 2
Color	Blue	Red
Design Wavelength	473 nm	633 nm
Transmission <sup>b</sup>	96.83%	97.27%
Insertion Loss <sup>c</sup>	0.14 dB	0.12 dB
Isolation <sup>d</sup>	20.30 dB	19.70 dB

Combiner Test Data over Bandwidth <sup>a,e</sup>			
	Channel 1	Channel 2	
Bandwidth	468-478 nm	628-638 nm	
Insertion Loss <sup>c,e</sup>	0.17 dB	0.15 dB	
Isolation <sup>d,e</sup>	17.8 dB	16.8 dB	

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

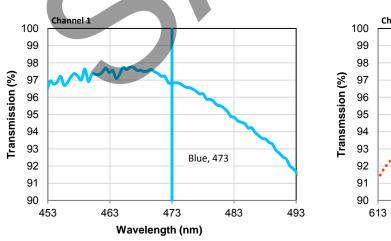
b. Calculated from measured insertion loss data below.

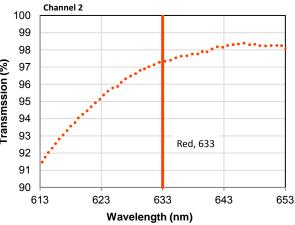
c. Insertion loss is the ratio of the input power to the output power for each leg of the wavelength combiner.

d. Isolation represents the minimum crosstalk between channels over the bandwidth.

e. Data shows worst case measurement over bandwidth.

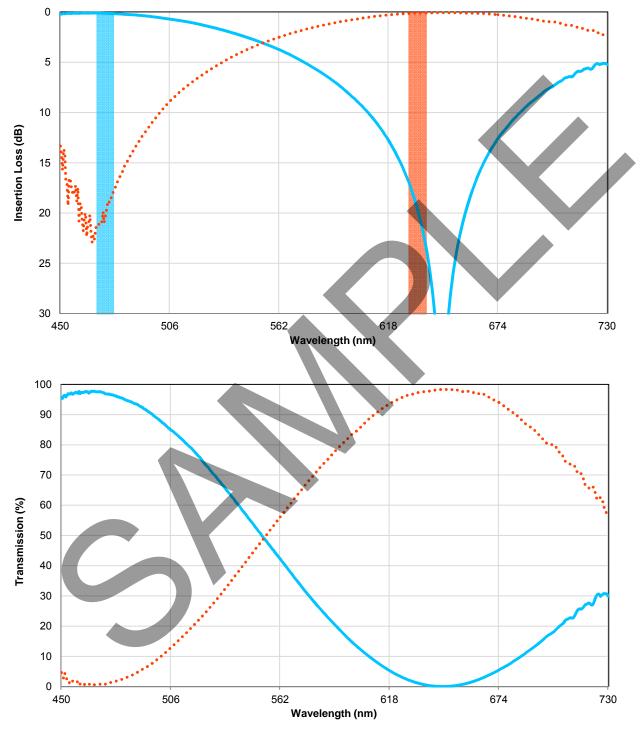
## **Channel Test Data**







## **Test Data**



This wavelength combiner operation is only guaranteed around each channel's 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.

Verified by: \_\_\_\_