

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

Item #: RGB30HA SN: A000232 Center Wavelength
Blue Port: 473 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 | |
| Wavelength | | 473 nm | 561 nm | 640 nm | |
| Transmission ^c | | 97.27% | 97.05% | 88.92% | |
| Insertion Loss ^d | | 0.12 dB | 0.13 dB | 0.51 dB | |
| | White Port | N/A | 27.2 dB | 32.2 dB | |
| Isolation ^e | Red Port | 17.5 dB | N/A | 14.6 dB | |
| | Blue Port | 18.6 dB | 26.1 dB | N/A | |

| Test Data over Bandwidth ^b | | | | | | |
|---------------------------------------|------------|------------|------------|------------|--|--|
| Bandwidth | | 468-478 nm | 556-566 nm | 635-645 nm | | |
| Transmission ^c | | 94.2% | 96.2% | 85.1% | | |
| Insertion Loss ^d | | 0.26 dB | 0.17 dB | 0.70 dB | | |
| Isolation ^e | White Port | N/A | 13.67 dB | 16.16 dB | | |
| | Red Port | 21.21 dB | N/A | 19.58 dB | | |
| | Blue Port | 24.40 dB | 11.64 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.

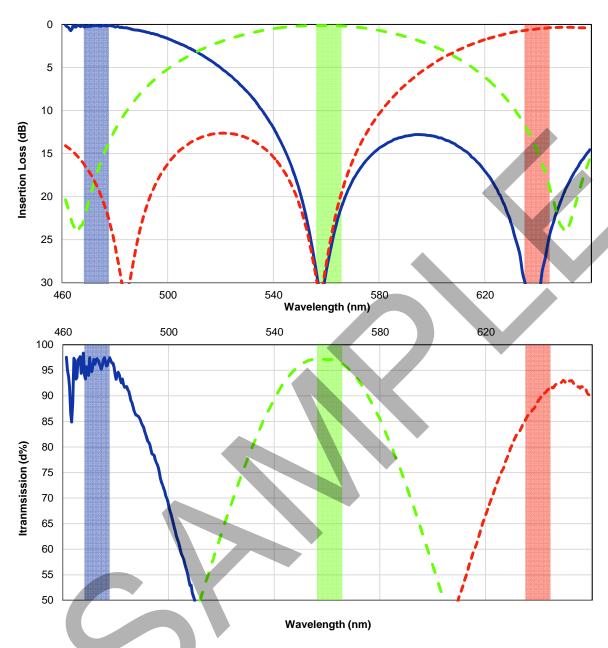
| Verified | by: | |
|----------|-----|--|
|----------|-----|--|

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

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.



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.