

## FINAL INSPECTION REPORT

## 1x2 50 µm Core 90:10 Multimode Coupler

Item #: TM50R2S1A SN: T026045

Bandwidth: 400 - 900 nm

Coupling Ratio Specification

Signal Output: 88.5 % - 91.5 %

Tap Output: 8.5 % - 11.5 %

Maximum Optical Power<sup>a</sup>
With Connectors or Bare Fiber: 2 W

Spliced: 4 W

Fiber Type: Thorlabs Custom Fiber

Test Data <sup>b</sup>	
Excess Loss <sup>c</sup>	≤ 0.5 dB
Input-Output Path	White (Input) – White (Signal Output)
Coupling Ratio <sup>d</sup>	89.7 %
Insertion Loss <sup>e</sup>	0.48 dB
Input-Output Path	White (Input) – Red (Tap Output)
Coupling Ratio <sup>d</sup>	10.3 %
Insertion Loss <sup>e</sup>	9.86 dB

- a. Specifies the maximum power allowed through the component. Performance and reliability under high power conditions must be determined within the user's setup.
- b. All values are measured at room temperature at 650 nm without connectors through the white input port.
- c. Ratio of the input optical power to the total optical power from all output ports. It is measured at the specified wavelength.
- d. Does not include losses, as this is a measurement of the output power distribution only.
- e. Includes both the split of the power between the two outputs, as well as any optical losses in the coupler.

