

# Supplementary Material

January 31, 2018

## 1 Pyrometer Components

Name	Part #	Manufacturer	Description
Fiber A	FT1000EMT	Thorlabs	2 m long with reinforced furcation tubing
Fiber B	FT1000EMT	Thorlabs	2 m long without tubing
Fiber A lens	LA4078	Thorlabs	50 mm diameter convex lens with 75 mm F/L
Fiber B lens	LA4078	Thorlabs	50 mm diameter convex lens with 75 mm F/L
50/50 beamsplitter	BSW23	Thorlabs	1 inch diameter 50:50 beamsplitter IR Fused Silica
Dichroic mirror	DMLP1800L	Thorlabs	2 inch longpass dichroic mirror
Red path lens	LA4078	Thorlabs	50 mm diameter convex lens with 75 mm F/L
Blue path lens	LA4078	Thorlabs	50 mm diameter convex lens with 75 mm F/L
F1	BP-1940-105-B	Infrared Optical Products	1 inch bandpass filter centered at 1940 nm with a full width half maximum of 105 nm
F2	BP-1705-097-B	Infrared Optical Products	1 inch bandpass filter centered at 1705 nm with a full width half maximum of 97 nm
Photodetectors	PDA10DT	Thorlabs	2 InGaAs Amplified Detectors with TEC, 0.9 – 2.57 $\mu\text{m}$

Table 1: List of pyrometer components shown in Fig. 2.

## 2 Interferometer Components

Name	Part #	Manufacturer	Description
Laser	Sapphire SF 532	Coherent	CW 532 nm single-frequency laser
Beam expander	BE05M-A	Thorlabs	5× Galilean optical beam expander
M <sub>1</sub> , M <sub>2</sub> , M <sub>3</sub> , M <sub>8</sub>	43-408-533	Edmund Optics	1 inch dia. enhanced aluminum, $\lambda/20$ Flat Fused Silica
P <sub>1</sub> , A <sub>2</sub>	47-215	Edmund Optics	12.5 mm dia. linear glass polarizer
L <sub>1</sub>	LA4545	Thorlabs	50 mm dia. 100 mm F/L UV fused silica plano-convex lens
WP <sub>1</sub> , WP <sub>2</sub>	68-820	Edmund Optics	25.4 mm dia. Quartz Wollaston prism
M <sub>4</sub>	32-067-533	Edmund Optics	4.25 inch dia. 34 inch F/L enhanced aluminum, $\lambda/8$ parabolic mirror
M <sub>5</sub> , M <sub>6</sub>	47-573-533	Edmund Optics	3 inch dia. enhanced aluminum, $\lambda/20$ Flat Fused Silica
M <sub>7</sub>	43-416-533	Edmund Optics	2 inch dia. enhanced aluminum, $\lambda/20$ Flat Fused Silica
camera	Phantom v711	Vision Research	High-speed camera

Table 2: List of shearing interferometer components shown in Fig. 4.