

Application	Instrument		Optical Configuration					Solid Secondary Standard	Recommended Test Tubes
	Instrument P/N	PMT (installed)	*Optical Kit P/N	Excitation Filter P/N & Description	Emission Filter P/N & Description	Reference Filter P/N & Description	Lamp P/N & Description		
<b>Ammonium or Colored / Fluorescent Dissolved Organic Matter (CDOM / FDOM)</b>	1100-101	Standard 300-650nm	10-303	034-0040 *350FS40-25 310-390nm	10-110R-C 410-600nm	10-300 >300nm	<a href="#">10-049</a> Near UV	10-327R <sup>2</sup> (if needed)	P/N 10-028A P/N 10-031
<b>Extractive and <i>in-vivo</i> Chlorophyll</b> (Acidification method)	1100-100	Red 185-870nm	10-037R	10-050R 340-500nm	10-051R >665nm	10-032 1 ND Square	<a href="#">10-045</a> Daylight White	Not Required	10-AU-904 P/N 10-028A P/N 10-031
<b>Extractive Chlorophyll</b> (Non-acidification method)	1100-100	Red 185-870nm	10-040R	034-0392 *436FS10-25 436nm	034-0395 *680FS10-25 680nm	10-032 1 ND Square	<a href="#">10-089</a> Blue Mercury Vapor	Not Required	10-AU-904 P/N 10-028A P/N 10-031
<b><i>In-Vivo</i> Chlorophyll</b> (Water with high dissolved organic matter(DOM) and/or chlorophyll <i>b</i> )	1100-100	Red 185-870nm	10-096R	10-050R 340-500nm	034-0395 *680FS10-25 680nm	10-032 1 ND Square	<a href="#">10-089</a> Blue Mercury Vapor	Not Required	10-AU-904 P/N 10-028A P/N 10-031
<b>Fluorescein</b>	1100-101	Standard 300-650nm	10-086R	034-0486 *486FS10-25 486nm	10-109R-C 510-700nm	10-063 >485nm	<a href="#">10-089</a> Blue Mercury Vapor	10-318R <sup>2</sup> (if needed)	P/N 10-028A P/N 10-031
<b>Phycocerythrin</b>	1100-101	Standard 300-650nm	10-304	034-0544 *544FS10-25 544nm	10-052R >570nm	10-053 >535nm	<a href="#">10-045</a> Daylight White	Not Required	P/N 10-028A P/N 10-031
<b>Phycocyanin</b>	1100-100	Red 185-870nm	10-305	034-0603 *600FS20-25 580-620nm	034-0640 *640FS10-25 640nm	10-051 >665nm	<a href="#">10-047</a> Cool White	Not Required	P/N 10-028A P/N 10-031
<b>Rhodamine WT</b>	1100-101	Standard 300-650nm	10-041R	034-0500 *550FS10-25 550nm	10-052R <sup>4</sup> >570nm (near PMT) <b>Red PMT only</b> 10-058R <sup>4</sup> 325-700nm (near sample)	10-053 >535	<a href="#">10-046</a> Clear Quartz <sup>1</sup>	Not Required	10-AU-904 P/N 10-028A P/N 10-031
<b>Oil, Short Wavelength</b> QUARTZ TEST TUBE REQUIRED!	1100-101	Standard 300-650nm	10-301R	034-0860 *254FS25-25 254nm	10-069R 300-400nm	10-300 Soft Glass >300nm	<a href="#">10-046</a> Clear Quartz <sup>1</sup>	10-327R <sup>2</sup> or 10-318R <sup>2</sup> (if needed)	P/N 10-029 P/N 10-295
<b>Oil, Long Wavelength</b>	1100-101	Standard 300-650nm	10-302R	10-069R 300-400nm	10-110R-C 410-600nm	10-300 Soft Glass >300nm	<a href="#">10-049</a> Near UV	10-327R <sup>2</sup> or 10-318R <sup>2</sup> (if needed)	P/N 10-028A P/N 10-031
<b>Optical Brighteners</b>	1100-101	Standard 300-650nm	10-306	10-069R 300-400nm	034-0392 *436FS10-25 436nm	10-300 Soft Glass >300nm	<a href="#">10-049</a> Near UV	10-318R <sup>2</sup> (if needed)	P/N 10-028A P/N 10-031
<b>Turbidity</b>	1100-101	Standard 300-650nm	10-307R	034-0500 *550FS10-25 550nm	034-0500 *550FS10-25 550nm	10-053 >535nm	<a href="#">10-046</a> Clear Quartz <sup>1</sup>	10-318R <sup>2</sup>	P/N 10-028A P/N 10-031

<sup>1</sup>Indicates Filter Mfg. Part # Reference.

**NOTE:** If Optical Kit P/N is ordered, kit will include excitation and emission filters plus two lamps and attenuator plates if applicable

**NOTES:**

For detailed information about installing filters, refer to your [Model 10-AU Fluorometer User's Manual](#).

1. **WARNING!** Light emitted from the clear quartz lamp will cause serious eye irritation, with a delay of about 4 hours between exposure and symptoms.
2. Over-scale readings may sometimes be caused by highly fluorescent samples or high background fluorescence. If this occurs, the instrument's sensitivity should first be set to the minimum level, then the instrument should be calibrated. If over-scale readings persist, attenuator plates should be installed to further minimize the signal.

To install the attenuator plate, remove the excitation filter from the filter holder. Insert the attenuator plate into the filter holder. Place the excitation filter back into the filter holder and secure it in place. For older 10-AU models that use square filters, attenuator plates must be used with Excitation Filter Adapter (P/N: 10-150).

**10-318R Attenuator Plate:** Installation of this plate will reduce the sensitivity by 5-fold. For instructions, see the Filter and Light Source Replacement Appendix in your user's manual.

**10-327R Attenuator Plate:** Installation of this plate will reduce the sensitivity by 75-fold. For instructions, see the Filter and Light Source Replacement Appendix in your user's manual.

3. For best results, warm-up the instrument for at least 30 minutes before use!
4. The 10-058R emission filter should only be used with red-sensitive PMT instruments. For instruments with standard PMTs, the 10-052R is the only emission filter required for the Rhodamine optical kit.

