

BioTek Cytation5 Objectives/Filter Cubes/LEDs Overview

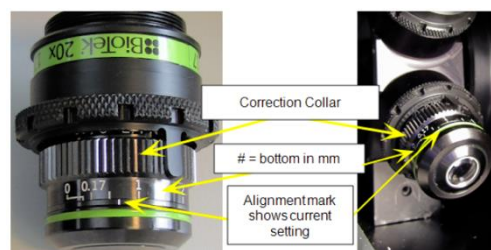
Objectives for Imaging

	Part Number	Numerical Aperture	Resolution (nm)	Depth of Field (µm)	Working Distance (mm)
4X	1320515	0.13	1346	38.9	17
10X	1320516	0.3	583	7.1	10
20X	1320517	0.45	388	2.9	6.4 – 7.6

All 3 objectives can be used for brightfield, color brightfield, phase contrast, and fluorescence.

Correction Collar on 20X objective can be adjusted to account for the thickness of the vessel. Use clean gloves to handle the objective and rotate the correction collar to be the thickness of the vessel. The table below has the typical thickness of common vessels, but check manufacturer specifications for the actual thickness, especially if using a plate for the first time.

Plate Type	Typical Thickness
Glass-bottom microplate	0.17 mm
Coverslip	0.17 mm
Plastic microplate (96-well plate)	0.5 mm
Low density microplate (6-well, 12-well, 24-well plates)	1.0 mm



Filter Cubes + LEDs for Imaging

Each filter cube is attached to a color shifted LED

		DAPI	GFP	RFP	Cy5
Filter cube	Part number	1225100	1225101	1225103	1225105
	Excitation/shoulder	377/50	469/35	531/40	628/40
	Emission/shoulder	447/60	525/39	593/40	684/40
	Mirror	409	467	568	660
LED	Part Number	1225000	1225001	1225003	1225005
	Description (center of wavelength of LED excitation)	365 nm	465 nm	523 nm	623 nm