

Leica DMI8 Objective/Camera Info

Objective

FOV: Field Of View FL: Fluorescence Camera (LEFT) CC: Color Camera (RIGHT)

Objective	5X	10X	20X	40X*	63X (oil)*	100X (oil)*
N.A.	0.12	0.45	0.4	0.95	1.4	1.4
FOV_FL (mm)	2.67 x 2.67	1.34 x 1.34	0.67 x 0.67	0.34 x 0.34	0.21 x 0.21	0.13 x 0.13
FOV_CC (mm)	2.64 x 1.76	1.32 x 0.88	0.66 x 0.44	0.33 x 0.22	0.21 x 0.14	0.13 x 0.09
Working Distance	14000um	2800um	6900um	170um	140um	90um
Resolution XY @ 550nm	2.80um	0.75um	0.84um	0.35um	0.24um	0.24um
Resolution Z @ 550nm	38.2um	2.72um	3.44um	0.61um	0.43um	0.43um

*: not suitable for plastic bottom dish or multi-well plate

Camera binning/format

Pixel Scale **FL : Fluorescence Camera (LEFT DFC9000GT)** Camera Pixel Size : 6.5um

Bin \ Objective	5X	10X	20X	40X	63X (oil)	100X (oil)
No binning	1.3um*	0.65um*	0.325um*	0.163um*	0.103um*	65nm
2x2	2.6um	1.3um	0.65um	0.325um	0.206um	130nm*
3x3	3.9um	1.9um	0.975um	0.489um	0.310um	195nm
4x4	5.2um	2.6um	1.3um	0.65um	0.41um	260nm
8x8	10.4um	5.2um	2.6um	1.3um	0.82um	520nm

*: recommended binning setting

Pixel Scale **CC : Color Camera (RIGHT DMC5400)** Camera Pixel Size : 2.4um

Format \ Objective	5X	10X	20X	40X	63X (oil)	100X (oil)
20MP	480nm	240nm	120nm	60nm	38nm	24nm
5MP	960nm	480nm*	240nm	120nm*	76nm	48nm
2.2MP	1450nm*	720nm	360nm*	180nm	114nm *	72nm*
4K	480nm	240nm	120nm	60nm	38nm	24nm

*: recommended format setting