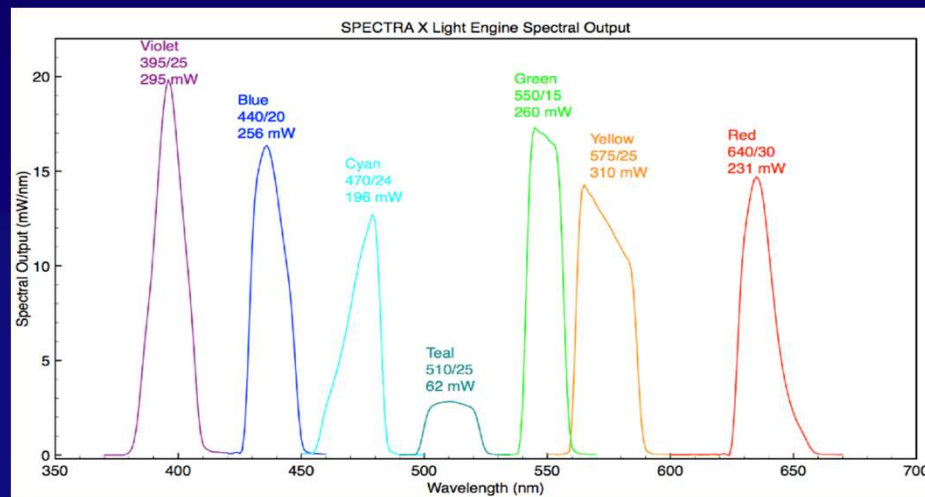
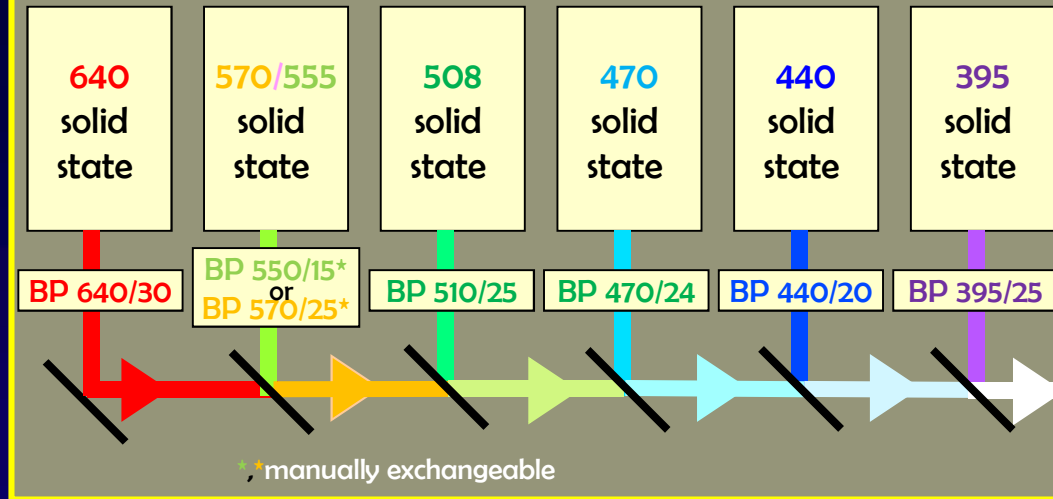


Nikon cell observer excitation options – May 21

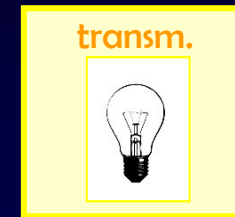


Lumencor X light engine with 6 individually on/off/intensity controllable solid state light sources



Filter cubes (see next page)

1. MXU71640 Quad (395, 470, 550, 640)
2. MXU74157 Triple (440, 510, 570)

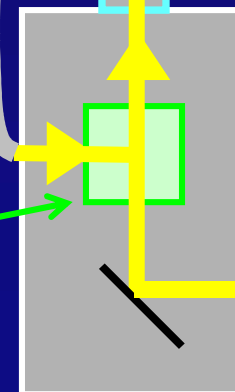


Objectives

1. Plan Apochromat 20x NA 0.75
2. Plan Apochromat 40x NA 0.95
3. Plan Apochromat 60x NA 1.4 (oil)
4. Plan Apochromat 100x NA 1.45 (oil)
5. Plan Apo 10x NA 0.45
6. Alignment tool

Em. Filter wheel:

1. Empty
2. DAPI FF01-450/70
3. CFP FF01-479/40
4. GFP FF01-527/70
5. YFP FF01-550/49
6. TRITC FF01-593/46
7. LP630
- 8-10. Open



Filter combinations Nikon Cell Observer, May 21



Probe (Color exc.)	Ex filter	Cube	Em filter	Eff. Ex band	Eff. Em band
DAPI (Violet, 395)	395/25	MXU71640 Quad	FF01-450/70	382-407	415-452
CFP (Blue, 440)	440/20	MXU74157 Triple	FF01-479/40	430-450	459-490
GFP (Cyan, 470)	470/24	MXU71640 Quad	FF01-527/70	458-483	492-541
YFP (Teal, 510)	510/25	MXU74157 Triple	FF01-550/49	498-523	526-555
RFP (Green, 550)	550/15*	MXU71640 Quad	FF01-593/46	543-558	570-616
RFP (Yellow, 575)	575/25*	MXU74157 Triple	FF01-593/46	562-587	593-616
RFP (Yellow, 575)	575/25*	MXU74157 Triple	none	562-587	593-699
Cy5,iRFP (Red, 640)	640/30	MXU71640 Quad	none	625-655	661-794

*Excitation filter 550/15 and 575/25 are mutually excluding and can be manually exchanged in Lumencor X unit.

MXU71640 Quad band cube (Violet, Cyan, Green, Red)
Labeled on cube: 77074160 custom Quad C174395

	Dichroic:	Emitter: (quad bandp.)
<411 reflect.	411-452 transm.	411-452 (blue)
452-485 reflect.	485-541 transm.	489-540 (green)
541-567 reflect.	567-621 transm.	570-621 (red)
621-656 reflect.	656-793 transm.	661-794 (far red)

MXU74157 Triple band cube (blue, teal, yellow)
Labelled on cube: 77074156 CFP/YFP/mCh XT, C172354

	Dichroic:	Emitter (triple bandp.)
<455 reflect.	455-491 transm.	457-490 (cyan)
491-523 reflect.	523-557 transm.	526-555 (yellow)
557-590 reflect.	590-800 transm.	593-699 (red)