OPTRONIC™
LABORATORIES

TECHNICAL COMPARISON OL 770 VS COMPETITION

SPECIFICATION	OPTRONIC LABORATORIES OL 770-LED	INSTRUMENT SYSTEM CAS-140CT	LABSPHERE CDS-3020	EVERFINE * HAAS-2000
Spectral Range	280 – 780 nm *(UV/VIS)* 380 – 780 nm *(VIS)* 380 – 1100 nm *(VIS/NIR)* 850 – 1700 nm *(InGaAs)*	200 – 800 nm 220 – 1020 nm 300 – 1100 nm 360 – 830 nm 380 – 1040 nm 750 – 1050 nm 780 – 1650 nm 1500 – 2150 nm	350 – 830 nm 360 – 1100 nm	200 – 400 nm *(UV)* 380 – 780 nm *(VIS)* 200 – 800 nm *(UVIS)* 350 - 1100 nm *(VIR)* 200 - 1200 nm *(UVIR)* 780 - 1650 nm *(IR)* 1500 - 2550 nm *(IR2)*
Wavelength Accuracy	± 0.5 nm Max but Typically Under .25 nm		±0.3nm ±0.5nm	± 0.3nm
Optical Bandwidth	VIS – 3.0 nm NIR – 5.0 nm UV – 3.5 nm InGaAs – 10.0 nm	-151 – 2.2 nm -152 – 2.7 nm -153 – 3.0 nm -154 – 3.7 nm -155 – 2.0 nm -170 – 15 nm 171 – 9 nm	3 nm	2.0 nm *(VIS)* 4 nm *(UV/VIS)* 4 nm *(VIR)* 5 nm *(UVIR)* 9 nm *(IR1)* 15 nm *(IR2)*
Stray Light *(Tungsten Source)*	$2.5E^{-4}$	$5.0E^{-4}$	$1.8E^{-5}$ *(450 – 550 nm)* *(Laser 633 nm)*	5E-5 but with 'Stray Light Algorithm' Applied to Data
Linearity	0.15% Over 3 Decades; < 1% Over 5 Decades	0.5%	± 0.5%	0.3%
Minimum Integration Time	5 ms Available	10 ms	5 ms	9 ms
Maximum Integration Time	300 s *(600 s for NIR)*	65 s	20 s	60 s
Dynamic Range	8 Decades *(with ND Filters)*		1000000:1 6 Decades *(with ND filters)*	16 bit
Interface	USB	USB	USB 2.0	USB 2.0
Operating Temperature Range	0° - 30°C	15° - 35°C	20 - 35°C and 'No Sudden Temp Changes'	Unknown

** Specifications are suspect*

Information Sheet: IS69 Feb 2019