



Principle	Integrating sphere
Light source	Image Engineering iQ-LED technology (2x): Overall 160 LEDs, 2 white channels and 20 color channels / controlled via 1000 steps per channel and 32 khz PWM / Spectral range: 400 – 820 nm / Approx. lifetime of 10.000h
Spectral Measurement	Integrated calibrated micro spectrometer (Spectral Range: 350 – 800 nm / Resolution: 1024 pixel)
Control System	Software based control system via USB
Uniformity of luminance in active chart area*	> 97%
Uniformity of luminance in full chart area*	> 96%
Predefined standard illuminants**	D50: 1400 lx / curve fit: 97% / CRI > 97 D55: 1400 lx / curve fit: 97% / CRI > 97 D65: 1400 lx / curve fit: 96% / CRI > 97 D75: 1400 lx / curve fit: 96% / CRI > 97 3200 (BB): 1000 lx / curve fit: 97% / CRI > 93 A: 1000 lx / curve fit: 95% / CRI > 91 B: 1400 lx / curve fit: 98% / CRI > 96 C: 1400 lx / curve fit: 97% / CRI > 95 F2: 1200 lx / curve fit: 75% / CRI > 80 F11: 1300 lx / curve fit: 70% / CRI > 80 F12: 1100 lx / curve fit: 70% / CRI > 80
Illumination stability***	+/- 2%
Response time (switch illuminant)	< 50 ms
Output data	Real time measurement of spectral trend, CCT, CRI, Illumination and radiant power
Maximum / Minimum illumination values	Maximum up to 2000 lx, depending on illuminant and required curve fit / CRI Minimum down to 25 lx, depending on illuminant and required curve fit / CRI For low intensity use, the system can be combined with a neutral density filter



Dimmable	Software based dim function by presetting intensity (lux / watt)
Warm up time	< 2 min. at optimal ambient temperature
Operating ambient temperature range	Optimal: 22 to 26 degree / Maximum: 19 to 29 degree
Chart mount	dual slot for D280 sized charts
Mounting	M10 thread on both sides for fixation on tripod
Computer requirements	PC with Windows 7 operating system (or higher) / USB port
Power supply	110 V / 230 V, 60 W
Dimension	710 mm x 620 mm x 430 mm
Weight	15.4 kg
Delivery includes	LE7 (2 x iQ-LED, internal micro spectrometer), power cord, USB cable, control software, tripod
Features	Auto generate of external measured spectra, creating or adaptation of spectral trends via 22 software controlled LED channels, save and load function of self defined spectral arrangements or intensities, creation of test sequences

* measured on uniformity chart for all predefined standard illuminants

** specified data: illuminant / chart backside illuminance [lx] / curve fit: spectral accordance of the generated LED light to the given standard illuminant curve [%] / color rendering index

***measured for all predefined standard illuminants after changing a illuminant at optimal ambient temperature