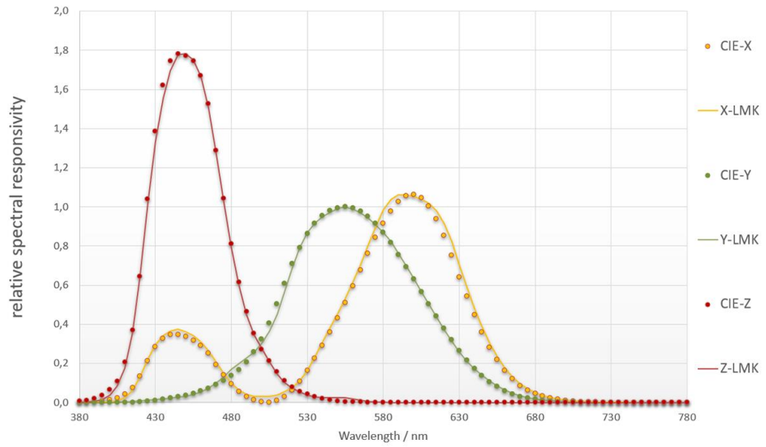
Comparison between LMK models

	LMK 6-5 color	LMK 6-12 color	LMK 6-30 color
Technical data			
Sensor – imaging CMOS matrix system	2464 × 2056 Pixel Sony-CMOS [IMX 250; 2/3" diagonal); 12 Bit digital]	4112 × 3008 Pixel Sony-CMOS [IMX 253; 1.1" diagonal); 12 Bit digital]	6480 × 4860 Pixel Sony-CMOS [IMX 342; APS-C; 12 Bit digital]
Housing dimensions without lenses (H×W×D)	stable black anodized aluminum housing: 117 mm × 90 mm × 47 mm	stable black anodized aluminum housing: 140 mm × 110 mm × 47 mm	stable black anodized aluminum housing: 150 mm × 170 mm × 70 mm
Weight	camera housing without lens: 800 g available lenses: 120 g – 800 g	camera housing without lens: 1300 g available lenses: 120 g – 1100 g	camera housing without lens: 1800 g available lenses: 200 g – 1100 g
Data interface	Gigabit Ethernet Interface (GigE)		
Metrological data			
Dynamic range	Single picture measurement: 1:1100 (~ 61 dB) High-Dynamic measure (exposure bracketing series): 1:10 000 000 (~140 dB)		
Spectral matching[1]	Matched to the V(λ) luminance function for luminance measurement with a full-glass filter		
Metrological specification	$V(\lambda)\ [\ f_1' < 3\ \%\ ]^2$ $X(\lambda)\ [\ f_{1,E}' < 4.5\ \%\ ]^3$; $Y(\lambda)\ [\ f_1' < 2.5\ \%\ ]^3$; $Z(\lambda)\ [f_{1,E}' < 6\ \%]^3$		
Measuring quantity	Luminance: L (cd/m²) Chromaticity coordinates for supported color spaces: RGB, sRGB, EBU-RGB, User-RGB, XYZ, Lxy, Luv, Lu'v', L*u*v*, C*h*s*$_{uv}$, L*a*b*, L*C*h*$_{ab}$, HSV, HSI, WST[4], LWS, Lrg (further measuring quantities can optionally be defined via scaling factors)		
Measuring range[4]	Integration/exposure time from 100 µs to 15 s $1\ \mathrm{ms} \approx \max. 10{,}000\ \mathrm{cd/m^2}$ $3\ \mathrm{s} \approx \max. 3.3\ \mathrm{cd/m^2}$ The detection limit[5] ($f_{3,0}$) for all integration/exposure times is about 0.04 % relative to the given maximum luminance value. Higher luminance can be measured using optional neutral density filters.		
Calibration uncertainty[6]	fix focused lenses $\Delta L\ [<\ 2\%\ ]$ focusable lenses $\Delta L\ [<\ 2.5\%\ ]$		
Repeatability[7]	$\Delta L\ [<\ 0.1\%\ ]$ $\Delta x, y\ [<\ 0.0001\ ]$		
Measuring accuracy	$\Delta L\ [<\ 3\%\ ]$for standard illuminant A $\Delta x, y\ [<\ 0.0020\ ]$ for CIE standard illuminant A $\Delta x, y\ [<\ 0.0030\ ]$ for white phosphor-converted LED $\Delta x, y\ [<\ 0.0100\ ]$set of test colors[8]		
Uniformity[6]	$f_{21}[<\ 2\ \%\ ]$		



Relative spectral responsivity curve of LMK 6 color model type

[1] Typical average result for entocentric lenses, specific results available with calibration certification or on request
[2] Spectral mismatch f'$_1$ according to ISO/CIE 19476:2014
[3] Typical result for LMK color model type
[4] The luminance value stands for the measuring range end value at the specified exposure/integration time
[5] Definition and measurement according to CIE 244:2021
[6] Measurements according to CIE 244:2021 using a luminance standard traceable to the PTB (Physikalisch-Technische-Bundesanstalt, the National Metrology Institute of Germany)
[7] Measurement performed on a stabilized white LED light source L=100 cd/m² – mean value over 100 × 100 camera image pixel
[8] Maximum difference of the measured value to the reference measurement using 12 LED-based luminance/color standards