

ZX-C0233 surface-mounted luminaire



ZX-C0233 (XC1 series) is a slim square surface-mounted luminaire supplied in four sizes — Ø400, Ø500, Ø600 and a 600 × 1,100 mm rectangular version. Four modes are available: reading and study (4,000 K), high-definition work (5,000 K), soft ambient (2,700 K) and a low-level sleep setting (2,700 K, dimmed). Brightness and colour temperature are adjusted steplessly from 10 % to 100 % from the remote control or the mobile app, and a night-light function is included. The measured output ranges from 4,141 lm in the Ø400 size to 7,201 lm in the 600 × 1,100 mm version at 2,700 K, with a measured colour rendering index of Ra 97.1 – 98.9 and a glare rating of UGR < 16. The diffuser is side-emitting and the luminaire is classified RG0.

Features

Light output (measured)	Ø400 4,141 lm · Ø500 6,047 lm · Ø600 7,000 lm (all at 4,000 K) · 600 × 1,100 mm 7,060 lm (reading mode)
Rated power	Ø400 > 50 W · Ø500 > 65 W · Ø600 > 85 W · 600 × 1,100 mm > 100 W
Operating modes	4 — reading and study (4,000 K), high-definition work (5,000 K), soft ambient (2,700 K), sleep (2,700 K, low level)
Dimming / control	Stepless 10 – 100 % brightness and colour temperature from the remote control or the mobile app
Colour temperature	2,700 K – 5,000 K
Colour rendering (measured)	Ra 97.1 – 98.9 · R9 87 – 97
Colour consistency (measured)	SDCM 2.5 (Ø500, 4,000 K) – 8.2 (Ø600, 5,000 K)
Glare / flicker	UGR < 16 · no visible flicker
Illuminance on the desk (declared)	Ø400 485 lx · Ø500 574 lx · Ø600 646 lx · 600 × 1,100 mm 803 lx · spatial uniformity > 0.9
Night light	Included
Light source	Self-developed 2825 LEDs, 0.5 W each, 2,700 K + 5,000 K — Ø400 308 pcs · Ø500 392 pcs · Ø600 476 pcs · 1,100 mm 616 pcs
Optical design / safety	Side-emitting diffuser · RG0 (exempt group) · 50,000 h service life
Certification	Five TÜV SÜD test certificates — radiation, flicker, blue light, colour rendering and illuminance
Net / gross weight	2.88 / 3.18 kg (Ø400) · 4.25 / 5.54 kg (Ø500) · 6.15 / 7.90 kg (Ø600) · 14.80 / 17.90 kg (1,100 mm)
Warranty	5 years

Application areas

Living rooms, bedrooms, studies and other residential rooms.

Technical data

Series / model name	KN-0233 · XC1
Input voltage	AC 220 – 240 V, 50 Hz
Rated power	Ø400 > 50 W · Ø500 > 65 W · Ø600 > 85 W · 600 × 1,100 mm > 100 W
Light output (measured)	Ø400 4,141 lm · Ø500 6,047 lm · Ø600 7,000 lm (4,000 K) · 600 × 1,100 mm 7,060 lm (reading)
Luminous efficacy (measured)	44.7 – 91.4 lm/W depending on size and setting
Colour temperature	2,700 K – 5,000 K
Colour rendering index (measured)	Ra 97.1 – 98.9 · R9 87 – 97
Colour consistency (measured)	SDCM 2.5 (Ø500, 4,000 K) – 8.2 (Ø600, 5,000 K)
Glare	UGR < 16
Flicker	No visible flicker
Illuminance (declared)	Ø400 485 lx · Ø500 574 lx · Ø600 646 lx · 600 × 1,100 mm 803 lx
Spatial uniformity	> 0.9
Dimming method	Stepless 10 – 100 % brightness and colour temperature, operated from the remote control or the mobile app
Mode selection	3 + 1 scene modes with a night-light setting
Light source	Self-developed 2825 LEDs, 0.5 W each, 2,700 K + 5,000 K
Optical design	Side-emitting diffuser
Photobiological safety	RG0 (exempt group)
Service life	50,000 h
Material	Steel, aluminium and acrylic
Certification	TÜV SÜD radiation, flicker, blue-light, colour-rendering and illuminance certificates
Certification / warranty	CE · RoHS · UL · 5 years

Family overview

Variant	Size	Power (rated)	LEDs (2825, 0.5 W)	Packing	Net / gross weight
KN-0233-400	Ø400 × H25 mm	> 50 W	308 pcs	460 × 460 × 92 mm	2.88 / 3.18 kg
KN-0233-500	Ø500 × H25 mm	> 65 W	392 pcs	560 × 560 × 92 mm	4.25 / 5.54 kg
KN-0233-600	Ø600 × H25 mm	> 85 W	476 pcs	660 × 660 × 92 mm	6.15 / 7.90 kg
KN-0233-1100	600 × 1,100 × 58 mm	> 100 W	616 pcs	660 × 1,159 × 152 mm	14.80 / 17.90 kg

Light output modes

Mode	Light engine	Colour temperature	Dimming	Control
Reading and study	Main	4,000 K	Stepless 10 – 100 %	Remote / app
High-definition work	Main	5,000 K	Stepless 10 – 100 %	Remote / app
Soft ambient	Main + backlight	2,700 K	Stepless 10 – 100 %	Remote / app
Sleep	Backlight	2,700 K	Dimmed low level	Remote / app

Mode, brightness and colour temperature are set from the remote control or the mobile app; the last setting used is restored when the luminaire is switched on again.

Measured performance (integrating sphere)

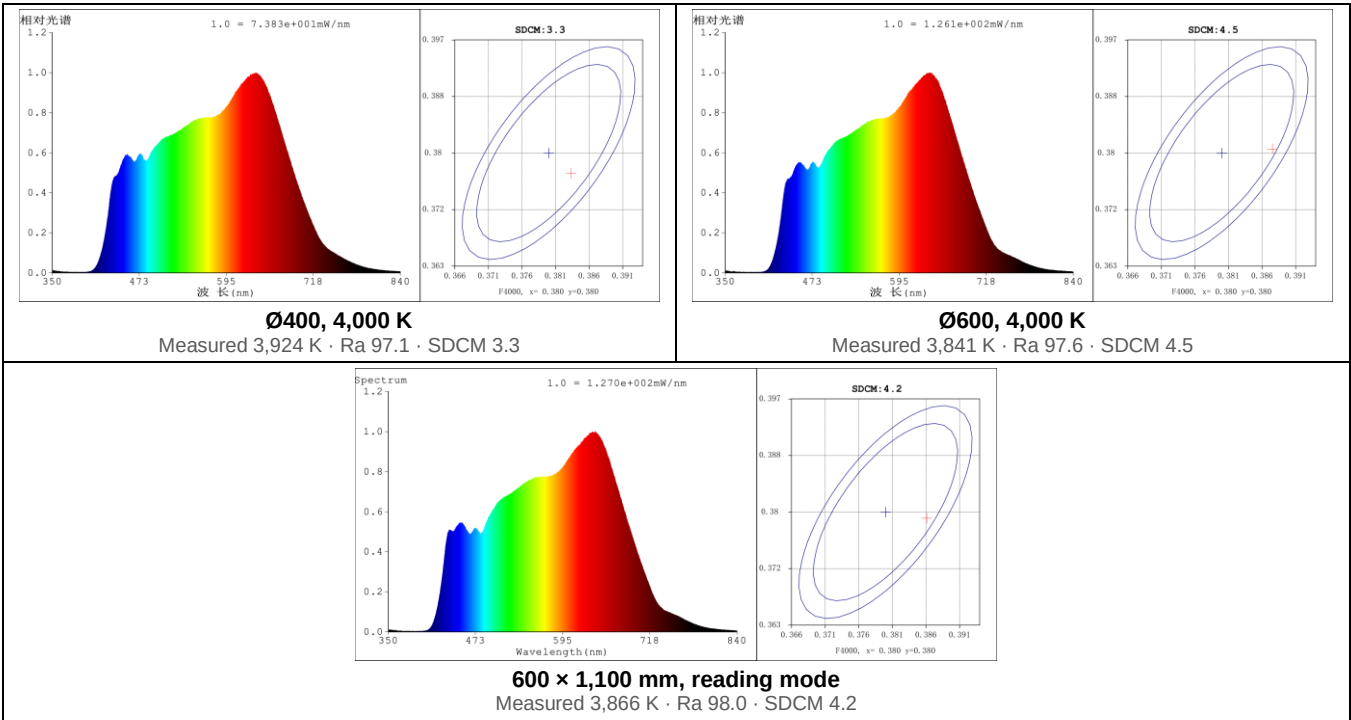
Variant	Setting	Measured CCT	Luminous flux	Power	Efficacy	Ra	R9	SDCM
Ø400	2,700 K	2,626 K	3,245 lm	49.0 W	66.2 lm/W	97.8	88	4.9
Ø400	4,000 K	3,924 K	4,141 lm	51.9 W	79.8 lm/W	97.1	92	3.3
Ø400	5,000 K	4,617 K	4,165 lm	53.4 W	78.0 lm/W	98.8	97	6.9

Variant	Setting	Measured CCT	Luminous flux	Power	Efficacy	Ra	R9	SDCM
Ø500	2,700 K	2,610 K	4,811 lm	63.8 W	75.4 lm/W	97.4	88	5.8
Ø500	4,000 K	3,948 K	6,047 lm	66.1 W	91.4 lm/W	97.9	95	2.5
Ø500	5,000 K	4,568 K	5,775 lm	64.3 W	89.9 lm/W	98.9	96	7.8
Ø600	2,700 K	2,586 K	5,752 lm	85.9 W	67.0 lm/W	97.6	87	7.0
Ø600	4,000 K	3,841 K	7,000 lm	84.4 W	83.0 lm/W	97.6	94	4.5
Ø600	5,000 K	4,462 K	6,951 lm	86.0 W	80.8 lm/W	98.9	96	8.2
600 × 1,100	Reading	3,866 K	7,060 lm	114.3 W	61.8 lm/W	98.0	94	4.2
600 × 1,100	Warm	2,615 K	7,201 lm	145.5 W	49.5 lm/W	98.1	90	5.5
600 × 1,100	Activity	4,236 K	6,315 lm	105.0 W	60.1 lm/W	98.5	95	4.4
600 × 1,100	Movie	2,543 K	2,543 lm	56.9 W	44.7 lm/W	98.1	94	7.1

Integrating-sphere measurement of the complete luminaire at AC 220 V, 50 Hz, taken on the workshop trial sample. The Ø400 – Ø600 records are the 2,700 K, 4,000 K and 5,000 K colour settings; the 600 × 1,100 mm records are the four scene modes.

Photometric data

Relative spectral power distribution and colour-ellipse (SDCM) plots, measured at rated output.



Measured with an EVERFINE HaasSuite spectroradiometer system (test records KN-0233, workshop trial sample). The right-hand panel of each figure is the colour-ellipse plot produced by the instrument.

Installation and safety notices

For indoor use only. Do not use the luminaire in damp areas or near water.

Connect the luminaire only to a mains socket matching the rated voltage, and disconnect it from the mains before cleaning or moving it.

Do not look directly at the light source. Clean the luminaire with a soft dry cloth only, with the luminaire switched off and cooled down.

Do not cover the light output surface with any material. Repair and replacement of the light source or the control gear must be carried out by a qualified person.

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Certification: CE · RoHS · UL

All values in this specification are typical values from laboratory measurement of the stated sample; for concrete data and shipping inspection reports please contact us. Information is subject to change without notice.

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