

ZX-F0298 free-standing luminaire



ZX-F0298 (model C2) is a free-standing luminaire with an upward and a downward light engine that together deliver 360° illumination. Four modes are available — 360° ambient (upper and lower, 4,000 K), glare-free canopy (upper only, 4,000 K), eye-comfort axis control (upper and lower, 2,700 K) and soft comfort (upper only, 2,700 K). Brightness is adjusted steplessly from 10 % to 100 % with the rotary control, a seat sensor switches the luminaire on when the user sits down and off when they leave, the last setting is remembered, and brightness and mode can also be set from a mobile app with radar presence detection. The measured output reaches 19,808 lm in the canopy mode and 15,382 lm with both engines running, with a measured colour rendering index of Ra 97.9 – 98.7 and the photobiological blue-light class RG0. The body is die-cast aluminium with a 6063-T6 profile.

Features

Light output (measured)	360° ambient 15,382 lm (upper 12,754 + lower 2,628) · glare-free canopy 19,808 lm · eye-comfort axis 10,872 lm (upper 8,475 + lower 2,397) · soft comfort 8,475 lm
Rated power / current	230 W / 1.25 A (measured 50.2 – 221.0 W depending on mode)
Operating modes	4 — 360° ambient, glare-free canopy, eye-comfort axis control, soft comfort
Dimming	Stepless 10 – 100 % brightness from the rotary control
Sensor / memory	Seat sensor switches the luminaire on when the user sits down and off after they leave; last setting remembered
App control	Brightness and mode, with radar presence detection
Colour temperature	4,000 K and 2,700 K light engines
Colour rendering (measured)	Ra 98.7 · R9 98 (4,000 K, lower) · Ra 98.2 · R9 95 (4,000 K, upper) · Ra 97.9 · R9 94 (2,700 K, upper)
Colour consistency (measured)	SDCM 1.2 (2,700 K, upper) – 5.2 (4,000 K, lower)
Glare	UGR ≤ 9 (glare-free canopy mode)
Illuminance on the desk (measured)	Centre 1,497 lx · total area 1,435 lx (360° ambient) · 1,124 / 1,070 lx (eye-comfort axis) · 890 / 890 lx (glare-free canopy)
Uniformity (measured)	1.08 (eye-comfort axis) · 1.10 (glare-free canopy) · 1.12 (360° ambient)
Light source	Upper 2835: 340 × 1 W (4,000 K) + 120 × 1 W (2,700 K); lower 2835: 120 × 1 W (4,000 K) + 120 × 0.5 W (2,700 K)
Photobiological safety / life	RG0 (exempt group) · 50,000 h
Product size / weight	757 × 390 × 2,027 mm · 17.9 kg net / 18.5 kg gross
Warranty	5 years

Application areas

Home study areas, living rooms and home offices.

Technical data

Series / model name	KN-0298 · C2
Input voltage	AC 220 – 240 V, 50 Hz
Rated power	230 W (measured 50.2 – 221.0 W depending on mode)
Rated current	1.25 A
Light output (measured)	360° ambient 15,382 lm · glare-free canopy 19,808 lm · eye-comfort axis 10,872 lm · soft comfort 8,475 lm
Luminous efficacy (measured)	43.8 – 98.6 lm/W depending on light engine and mode
Colour temperature	4,000 K · 2,700 K
Colour rendering index (measured)	Ra 98.7 · R9 98 (4,000 K, lower) · Ra 98.2 · R9 95 (4,000 K, upper) · Ra 96.7 · R9 83 (2,700 K, lower) · Ra 97.9 · R9 94 (2,700 K, upper)
Colour consistency (measured)	SDCM 1.2 (2,700 K, upper) – 5.2 (4,000 K, lower)
Glare	UGR ≤ 9
Illuminance (measured)	360° ambient centre 1,497 lx · total area 1,435 lx · eye-comfort axis 1,124 / 1,070 lx · glare-free canopy 890 / 890 lx
Uniformity (measured)	1.08 (eye-comfort axis) · 1.10 (glare-free canopy) · 1.12 (360° ambient)
Dimming / sensor / memory	Stepless 10 – 100 % brightness from the rotary control; seat sensor and radar presence detection; last setting remembered
Light source	Upper 2835: 340 × 1 W (4,000 K) + 120 × 1 W (2,700 K); lower 2835: 120 × 1 W (4,000 K) + 120 × 0.5 W (2,700 K)
Optical design	Direct-emitting upper and lower light engines
Photobiological safety / life	RG0 (exempt group) · 50,000 h service life
Product size / packing	757 × 390 × 2,027 mm · packed 1,130 × 500 × 180 mm, 1 pc per carton
Material / weight	Die-cast aluminium body with 6063-T6 profile · 17.9 kg net / 18.5 kg gross
Certification / warranty	CE · RoHS · UL · 5 years

Light output modes

Mode	Light engines	Colour temperature	Luminous flux (measured)	Dimming
360° ambient	Upper + lower	4,000 K	15,382 lm	Stepless 10 – 100 %
Glare-free canopy	Upper only	4,000 K	19,808 lm	Stepless 10 – 100 %
Eye-comfort axis	Upper + lower	2,700 K	10,872 lm	Stepless 10 – 100 %
Soft comfort	Upper only	2,700 K	8,475 lm	Stepless 10 – 100 %

All four modes are recalled from the control panel and brightness is adjusted steplessly between 10 % and 100 % with the rotary control. The glare-free canopy mode is the UGR ≤ 9 setting.

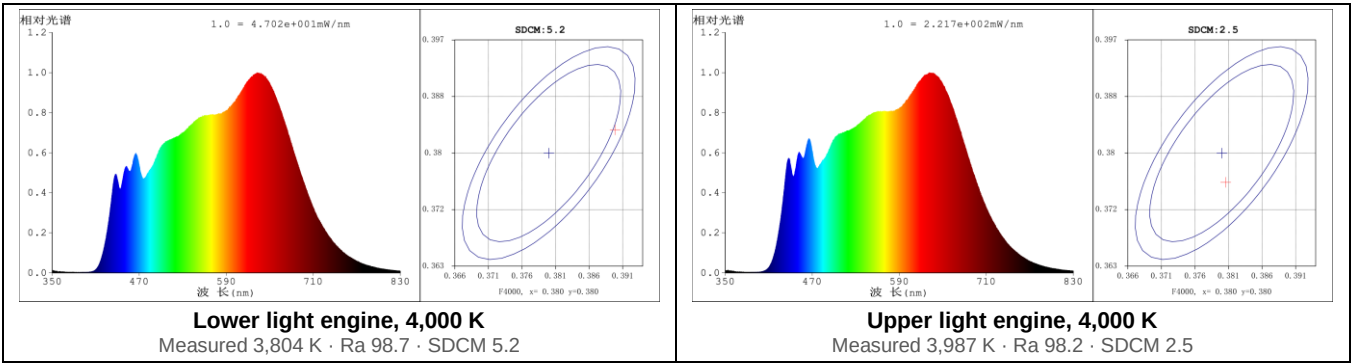
Measured performance (integrating sphere)

Light engine	Measured CCT	Luminous flux	Power	Efficacy	Ra	R9	SDCM
Lower, 4,000 K	3,804 K	2,628 lm	50.2 W	52.4 lm/W	98.7	98	5.2
Lower, 2,700 K	2,665 K	2,397 lm	54.7 W	43.8 lm/W	96.7	83	3.0
Upper, 4,000 K	3,987 K	12,754 lm	129.4 W	98.6 lm/W	98.2	95	2.5
Upper, 2,700 K	2,699 K	8,475 lm	113.5 W	74.7 lm/W	97.9	94	1.2
Upper, 4,000 K (canopy)	3,984 K	19,808 lm	221.0 W	89.6 lm/W	98.6	97	2.9

Integrating-sphere measurement of the complete luminaire at AC 220 V, 50 Hz. The canopy setting was measured on two further samples: 18,558 lm / 203.6 W and 19,010 lm / 211.1 W. Power factor 0.88 – 0.98 measured.

Photometric data

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



Measured with an EVERFINE HAAS-1200 spectroradiometer system (test record KN-0298, sample C2). 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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