

ZX-F0281 free-standing luminaire



ZX-F0281 is a free-standing LED luminaire with independent upward and downward light sources that produce 360° illumination around a work area. The downward light is emitted directly through an anti-glare micro-prism diffuser, keeping glare low ($UGR \leq 14$) for long reading or working sessions. A rotary knob and touch keys control the three output modes and stepless dimming from 10 % to 100 %, and a radar presence sensor switches the luminaire on when the user arrives and fades it down and off after the user leaves. The housing is made of aluminium with a PC optical kit.

Features

Light output	Reading 7,000 lm · Creative 3,000 lm · Soft ambient 4,500 lm ($\pm 5\%$)
Rated power	100 W ($+ 5\%$); upper and lower light sources independently controlled
Glare	$UGR \leq 14$
Colour rendering	$R_a > 97$ (upper + lower); $R_f 96$ · $R_g 100$ · CQS 97 · $R_9 > 95$
Colour temperature	4000 K ± 200 K; SDCM < 5
Illuminance	1,200 lx $\pm 5\%$ over a 50 × 30 cm area; uniformity 1.11
Dimming	Stepless 10 – 100 %, upper and lower light independently dimmable
Control	Rotary knob + touch keys; three preset output modes with smooth fade-in / fade-out
Presence sensor	Radar sensor — automatic switch-on; fades down after 10 min absence and switches off 1 min later
Flicker	Modulation depth $< 0.25\%$ at ≈ 20 kHz (flicker-free)
Light source	Full-spectrum LED (Bridgelux); direct emission with anti-glare micro-prism diffuser
Housing	Aluminium body; PC optical kit
Assembly	Tool-free DIY assembly — luminaire body, pole, base, power cable, accessory kit
Warranty	5 years

Application areas

Home study and reading areas, children's study areas, living rooms.

Technical data

Input voltage	AC 220 – 240 V (operating range 176 – 264 V), 47 – 63 Hz
Power factor / conversion efficiency	≥ 0.95 / ≥ 0.80 at full load, 220 V AC
Rated power	100 W (+ 5 %)
Luminous flux (integrating sphere)	Reading 7,000 lm · Creative 3,000 lm · Soft ambient 4,500 lm (± 5 %)
System luminous efficacy (derived)	≈ 70 lm/W (reading flux at rated power)
Colour temperature	4000 K ± 200 K
Colour rendering index	Ra > 97 (upper + lower), measured after 15 min operation
Colour consistency	SDCM < 5
Glare	UGR ≤ 14
Colour metrics	Rf 96 ± 1 · Rg 100 ± 1 · CQS 97 ± 1 · R9 > 95
Illuminance / uniformity	1,200 lx ± 5 % (50 × 30 cm area) / 1.11
Flicker	Maximum light-output modulation < 0.25 %, minimum < 2.5 %, at ≈ 20 kHz
Dimming range	10 – 100 %
Light source	Upper: 120 × 0.5 W LED modules (2835), 8P15S; lower: 105 × 0.5 W LED modules (2835) with lenses; Bridgelux full-spectrum
Optical structure	Direct emission + anti-glare micro-prism diffuser
LED driver	Built-in 48 V, 2.5 A constant-voltage LED control gear
Head / base / height	620 × 350 × 36.5 mm / 450 × 300 × 7.5 mm / 2,000 mm (± 5 mm)
Housing material / colour	Aluminium body, PC optics / white; any colour on request (powder coating)
Net / gross weight	12.2 kg / 14.2 kg
Packing	1,230 × 442 × 150 mm kraft carton, 1 pc per carton; carton gross weight 16 kg
Drop test	ISTA 1A, drop height 61 cm (carton gross weight 16 kg)
Operating temperature	-10 °C to +40 °C, ambient
Certification	CE · RoHS · UL
Warranty	5 years

Light output modes

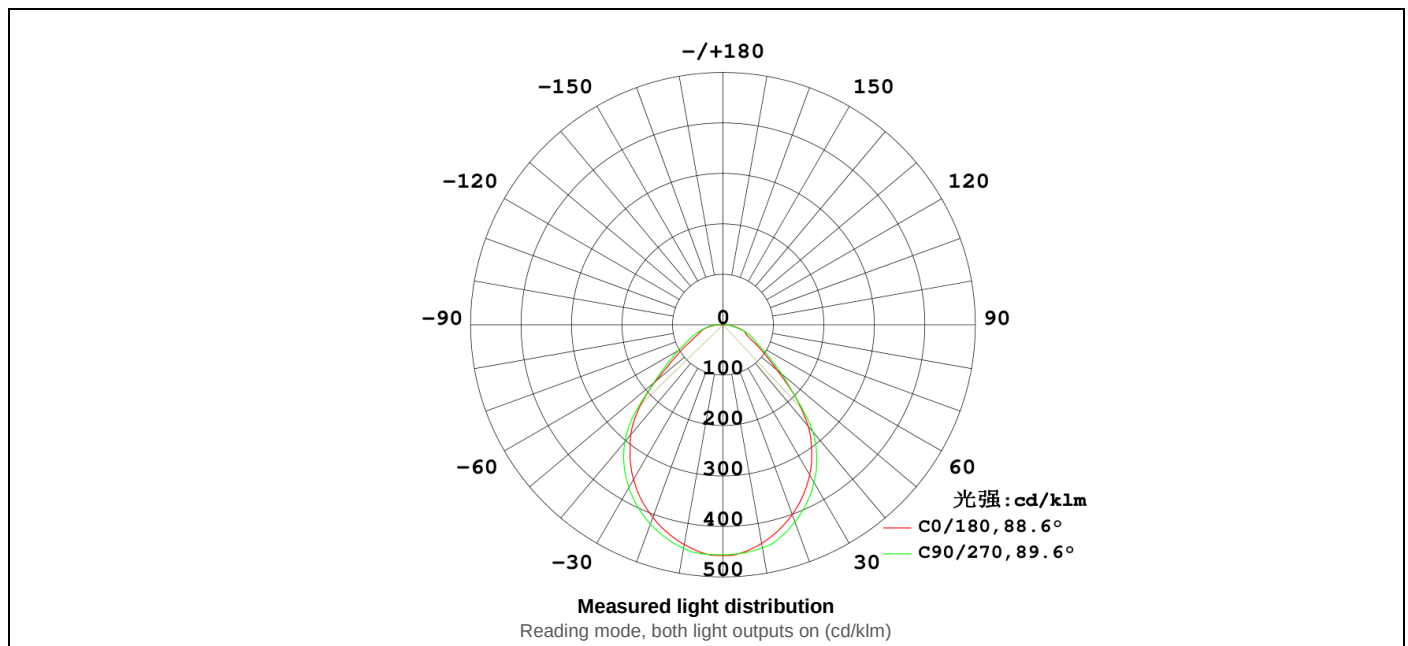
Mode	Light sources	CCT	Luminous flux
Reading	Upper + lower	4000 K	7,000 lm (± 5 %)
Creative	Lower only	4000 K	3,000 lm (± 5 %)
Relax	Upper only	4000 K	4,500 lm (± 5 %)

Electrical characteristics (measured at AC 220 V)

Condition	Voltage	Power, cold (3 s)	Power, steady (1 h)	Power factor
Standby	215 – 230 V	—	—	not required
Reading (upper + lower)	215 – 230 V	88 – 100 W	95 – 110 W	> 0.96
Creative (lower)	215 – 230 V	47 – 52 W	50 – 54 W	> 0.9
Relax (upper)	215 – 230 V	48 – 54 W	52 – 56 W	> 0.9

Measured at AC 220 V with a constant-voltage LED control gear; values are indicative and may be adjusted with product requirements.

Photometric data



Measured with an EVERFINE GO-2000B goniophotometer (C-γ system: 0–360° in 22.5° steps, 0–180° in 1.0° steps); both light outputs on.

Dimensioned component drawings are available on request.

Installation and safety notices

- Specified room temperature for use: -10 °C to +40 °C. Do not use the luminaire in damp areas or near water.
- Installation, inspection, maintenance and replacement of the light source must be carried out by a qualified person. Do not disassemble the luminaire.
- Do not look directly at the light source. Do not lay the luminaire on carpets, bedding or other flammable surfaces while it is switched on.
- Per single-phase circuit, do not connect more than 25 luminaires and do not exceed 16 A.

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Certification: CE · RoHS · UL

All values in this specification are typical values from laboratory measurement; for concrete data and shipping inspection reports please contact us. Information is subject to change without notice. Please verify all details before ordering.

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