

ZX-F0712 free-standing luminaire



ZX-F0712 is a free-standing LED luminaire with independent upper and lower light sources that create 360° illumination around a work area. Light is emitted from the side and passes through an anti-glare micro-prism diffuser, so glare stays low ($UGR \leq 10$) during long reading or working sessions. Operation is concentrated on a rotary knob and touch keys on the pole: three preset output modes, stepless dimming from 10 % to 100 %, and a radar presence sensor that switches the luminaire on when the user arrives and fades it down and off after the user leaves. The body is made of aluminium with a PMMA + PC optical kit and is supplied ready for tool-free DIY assembly.

Features

Light output	Up 5,990 lm + down 3,550 lm — total 9,540 lm ($\pm 5\%$)
Rated power	130 W (+ 5 %); upper and lower light sources independently controlled
Glare	$UGR \leq 10$
Colour rendering	$R_a > 96$ (upper) / $R_a > 97$ (lower) / $R_a > 98$ (upper + lower); $R_f 96 \cdot R_g 100 \cdot CQS 97 \cdot R_9 > 95$
Colour temperature	4000 K ± 200 K; SDCM < 5
Illuminance	1,300 lx $\pm 5\%$ over a 50 × 30 cm area; uniformity 1.2
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 15 min absence and switches off 1 min later
Flicker	Modulation depth $< 0.25\%$ at ≈ 20 kHz (flicker-free)
Light source	Full-spectrum LED (Bridgelux); side-emitting light guide with anti-glare micro-prism diffuser
Housing	Aluminium body; PMMA + 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 / ≥ 0.84 at full load, 220 V AC
Rated power	130 W (+ 5 %)
Luminous flux (up / down / total)	5,990 lm / 3,550 lm / 9,540 lm (± 5 %)
System luminous efficacy (derived)	≈ 73 lm/W (total flux at rated power)
Colour temperature	4000 K ± 200 K
Colour rendering index	Ra > 96 (upper) / Ra > 97 (lower) / Ra > 98 (upper + lower), measured after 15 min operation
Colour consistency	SDCM < 5
Glare	UGR ≤ 10 and ≤ 12 (two measured conditions)
Colour metrics	Rf 96 ± 1 · Rg 100 ± 1 · CQS 97 ± 1 · R9 > 95
Illuminance / uniformity	1,300 lx ± 5 % (50 × 30 cm area) / 1.2
Flicker	Maximum light-output modulation < 0.25 %, minimum < 2.5 %, at ≈ 20 kHz
Dimming range	10 – 100 %
Light source	Upper: aluminium PCB, 168 × 0.5 W; lower: flexible LED strip, 252 × 0.2 W; Bridgelux full-spectrum
Optical structure	Side-emitting light guide + anti-glare micro-prism diffuser
LED driver	48 V constant-voltage LED control gear
Head / base / height	588 × 356 × 31.5 mm / 450 × 320 × 7.5 mm / 2,025 mm (± 5 mm)
Housing material / colour	Aluminium body, PMMA + PC optics / white; any colour on request (powder coating)
Net / gross weight	12.2 kg / 14.2 kg
Packing	1,200 × 416 × 157 mm kraft carton, 1 pc per carton; carton gross weight 14.2 kg
Drop test	ISTA 1A, drop height 61 cm (gross weight 14.2 kg)
Operating temperature	-10 °C to +40 °C, ambient
Storage temperature	-20 °C to +50 °C
Certification	CE · RoHS · UL
Warranty	5 years

Light output modes

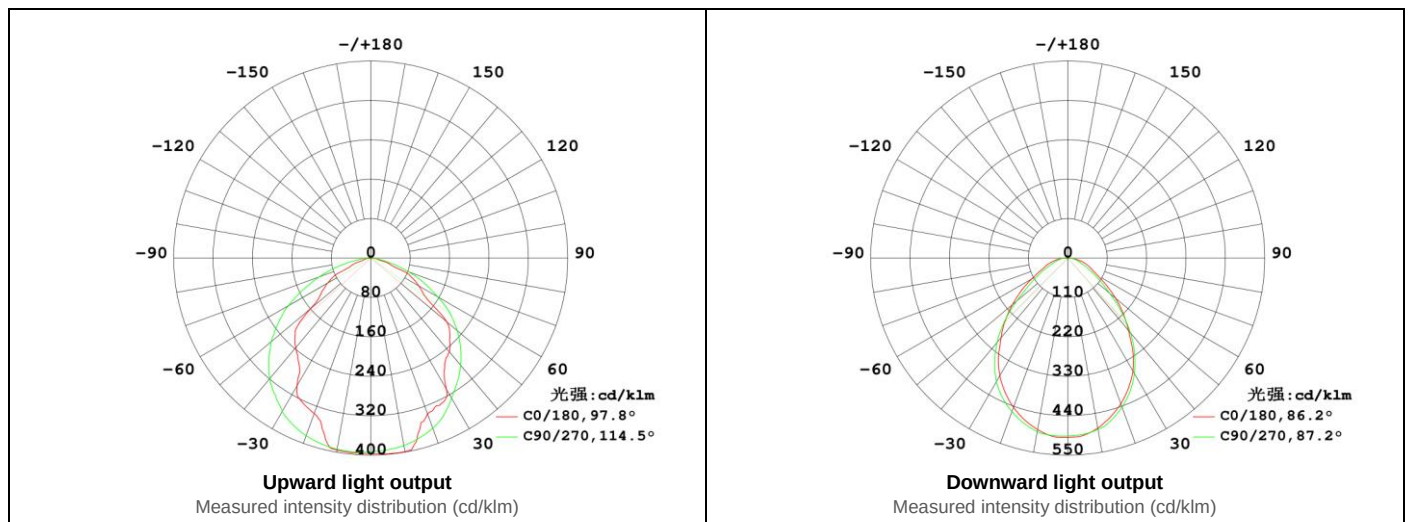
Mode	Light sources	CCT	Brightness
Reading	Upper + lower	4000 K	100 %
Creative	Lower only	4000 K	100 %
Relax	Upper only (lower off)	4000 K	100 %

Electrical characteristics (measured at AC 220 V)

Condition	Voltage	Current	Power	Power factor
Standby	210 – 230 V	—	< 1 W	not required
Reading, max	210 – 230 V	550 – 650 mA	124 – 134 W	> 0.96
Eye-comfort, max	210 – 230 V	550 – 650 mA	124 – 134 W	> 0.96
Relax, max	210 – 230 V	270 – 350 mA	67 – 77 W	> 0.96

Measured at AC 220 V with 48 V constant-voltage LED control gear; mode names as used in the electrical test report. 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); the opposite light output was covered during each measurement.

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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