

China Sourcing Feasibility Report

Product: LED desk lamp (dimmable, touch control, USB-A charging port, no wireless)

Target retail: US\$35.99 **Planned volume:** 200 units/month **Market:** Amazon US + EU (DE)

Data checked: 2026-10-22 **Report generated:** 2026-10-22

All prices, costs and fees in this report are ESTIMATES based on public web pages (no login) or on stated assumptions. Indicative supplier prices are list prices, not negotiated quotes. Verify before ordering. This is not legal or customs advice.

1. Executive verdict: CAUTION

- Strongest manufacturing base of the three: Zhongshan Guzhen claims ~50% of global lighting market share (local authority data).
- Compliance is the gating cost: UL 153 test report + FCC SDoC for US, CE (LVD/EMC/RoHS/ErP) + EPREL registration for EU. Budget roughly US\$1,500-3,000 before first sale (converted from CNY quotes).
- Margin is acceptable but thinner after freight and FBA for a bulky item; any wireless (Bluetooth, Qi charger) moves FCC to full Certification and raises cost.

Estimated net margin (Section 5 model): 18% with +25% Sec. 301 (base case) / 24% if not applicable. **Est. monthly profit:** roughly US\$1,000-2,000 (based on stated assumptions). **Est. working capital for 3 months stock:** ~US\$8,000 (based on stated assumptions) plus compliance tests (Section 3).

2. Manufacturing hubs: side-by-side comparison

Hub	Specialty	Price level	Typical MOQ	Pros	Cons	Sources
Guzhen (Zhongshan), Guangdong	China's lighting capital: decorative + LED fixtures, huge component ecosystem	Low-Mid	Stock models from 12 pcs (listing); custom ~500-1,000 (est.)	Deepest supplier base, fast sampling, exhibition hub	Thousands of small firms (67% registered capital < CNY 1M in 2018) - quality spread wide	http://www.zs.gov.cn/ywb/economy/foreigntrade/content/post_2609134.htm... ; https://m.lightingchina.com/News/Detail/59595
Xiaolan / Henglan (Zhongshan), Guangdong	Larger desk-lamp OEMs (e.g. Guanya: ~6M desk lamps/yr, Walmart supplier)	Mid	Higher (est. 1,000+ for OEM)	Retail-grade QA, existing UL/ETL files, patents held in-house	Less interested in small first orders	https://en.zsnews.cn/Business/Entrepreneurship/Innovation/content/379/3... ; http://www.zs.gov.cn/ywb/economy/content/post_1937410.html
Shenzhen, Guangdong	Electronics-heavy lamps: smart/app control, wireless charging bases, battery lamps	Mid-High	500+ (est.)	Best for differentiated electronics features	Wireless features trigger FCC ID / RED costs	https://m.lightingchina.com/News/Detail/59595

Price level is relative within this category (our assessment). MOQs marked "est." are typical ranges, not quotes.

3. US / EU certification & compliance checklist

Market	Requirement	Status	Est. test cost	Est. timeline	Official source	Secondary (lab/price)
US	UL 153 (portable luminaires) test report from ISO 17025 lab; LED driver per UL 8750	De facto mandatory on Amazon	CNY 1,000-3,000 (~US\$140-420)	7-10 days	https://www.osha.gov/national-recognized-testing-laboratory-program	https://en.meidetest.com/359.html ; https://www.compliancegate.com/underwriters-laboratories-ul-product-labeling
US	FCC Part 15B - SDoC (no wireless). Wireless/Qi => FCC Certification (FCC ID)	Mandatory	CNY 1,500-3,500 (~US\$210-490) for SDoC	7-10 days	https://www.ecfr.gov/current/title-47/chapter-I/subchapter-A/part-15 ; https://www.fcc.gov/enforcement/areas/equipment-authorization-marketin... ; https://en.meidetest.com/359.html	https://www.fcc.gov/enforcement/areas/equipment-authorization-marketin... ; https://en.meidetest.com/359.html
US	Prop 65 (cord PVC often contains DEHP/lead) - warning or test	If applicable	Quote needed	-	https://oehha.ca.gov/proposition-65	https://www.compliancegate.com/california-proposition-65/
EU	CE: LVD EN 60598-2-4, EMC EN 55015/EN 61547, RoHS	Mandatory	CNY 8,000-15,000 (~US\$1,130-2,110)	7-10 days	https://eur-lex.europa.eu/eli/dir/2014/35/oj ; https://eur-lex.europa.eu/eli/dir/2014/30/oj ; https://eur-lex.europa.eu/eli/dir/2011/65/oj	https://en.meidetest.com/359.html
EU	ErP/ecodesign + energy label, EPREL database registration; WEEE registration (DE: stiftung ear); GPSR responsible person	Mandatory	Registration/agent fees - quote needed	2-6 weeks (est.)	https://eur-lex.europa.eu/eli/reg/2019/2020/oj ; https://eur-lex.europa.eu/eli/reg_del/2019/2015/oj ; https://eprel.ec.europa.eu/	https://en.meidetest.com/359.html

Official source = regulator / legislation page (eCFR, FDA, FCC, OEHHA, OSHA, CPSC, EUR-Lex, ECHA). Secondary = lab price pages or guides, used only for cost/timeline estimates.

CNY amounts converted at an assumed 7.1 CNY/USD. Lab prices are published list prices; request a quote for your exact SKU. Test reports must match the exact SKU, colour and materials.

4. Key risks: IP / patents, Amazon gating, quality, seasonality

Risk	Assessment & mitigation
IP / patents	Lamp designs are actively enforced: Williams-Sonoma litigated lamp designs on Amazon (court filing). Guanya alone holds 800+ patents. Run a design-patent search on the exact silhouette; prefer factory's own design with written IP warranty.
Amazon gating	Desk lamps generally ungated, but Amazon removes electrical listings and strands FBA stock if UL-standard test reports are not provided on request (seller notice quoted by ComplianceGate).
Quality	Flicker (cheap PWM dimming), driver failure, hinge fatigue, USB port overheating. Specify flicker-free / CRI>=90 in PO, run 48h burn-in and hinge cycle tests at pre-shipment inspection.
Seasonality	Back-to-school (Jul-Sep) and Q4 peaks.

5. Landed cost & margin estimate (per unit, US\$)

Line item	No extra 301	+25% Sec. 301	Assumption / source
Ex-factory (FOB)	8.50	8.50	Assumed US\$8.50 (top of the US\$7.00-8.80 listing + retail packaging)
Freight to FBA	2.00	2.00	Assumption: sea consolidated, ~1.5 kg boxed
Import duty	0.33	2.46	Assumed classification HTS 9405.21.8010 (LED desk luminaire, not base metal, household); general rate 3.9% verified via USITC HTS API on 2026-10-22 - confirm classification with a broker. 9405.21.80 listed under 9903.88.03 (USITC China Tariffs list 2026 Rev 1); Section 301 continued per Federal Register 2026-10-07. Other 2026 China duties not modelled - verify. Official: https://hts.usitc.gov/search?query=9405.21.80 ; https://hts.usitc.gov/reststop/search?keyword=9405.21.80 ; https://hts.usitc.gov/reststop/file?filename=China+Tariffs&release;=202... ; https://ustr.gov/issue-areas/enforcement/section-301-investigations/ta...
Landed cost	10.83	12.96	
Referral fee	5.40	5.40	15% of price (assumed)
FBA fulfilment	6.50	6.50	Assumed large-standard ~2-3 lb from 2026 rate band. FBA large-standard non-peak 2026: \$3.73-\$6.97+ for items priced \$10-\$50, +3.5% surcharge from 2026-04-17; peak fees 2026-10-15 to 2027-01-14 (goatconsulting.com, fbaessentials.com; official: sellingpartners.aboutamazon.com). Referral fee assumed 15%.
PPC advertising	3.60	3.60	10% of price (assumption)
Returns/damage	1.08	1.08	3% of price (assumption)
Net profit / unit	8.58	6.46	at US\$35.99
Net margin	24%	18%	excludes storage, compliance tests, samples, inspection

6. Indicative public price listings (secondary evidence)

Listing	Indicative price	MOQ	URL (checked 2026-10-22)
Dimmable LED desk lamp, 5-level, USB port (Zhongshan Huapai)	US\$7.00-8.80 FOB	12 pcs	https://www.tradewheel.com/p/dimmable-led-desk-lamp-5-level-dimmer-547...
Eye-caring dimmable lamp w/ USB (Zhongshan Benchuan)	Not shown	12 pcs	http://54661.lightstrade.com/view/542477/LED-Desk-Lamp-Eye-caring-Tabl...
18W eye-care desk lamp w/ USB (Jun Sheng, Zhongshan)	See listing	See listing	https://www.tradewheel.com/p/modern-dimmable-white-18w-eye-care-desk-3...

List prices on B2B portals are often lead-generation prices; expect real quotes for your spec to differ.

7. Supplier vetting checklist

- Business licence (■■■■■) scope includes manufacturing of this product; check name on the national enterprise credit system.
- Factory vs trader: live video walk-through of the production line making YOUR product type; ask for the bill of materials.
- Ask for existing test reports in the factory's own name and verify report numbers with the issuing lab.
- Order samples from at least 3 suppliers across 2 hubs; test the same items side by side.
- Written PO spec: materials/grade, weight, dimensions, colour (Pantone), packaging, labelling, test requirements, IP warranty.
- Payment: 30% deposit / 70% after third-party pre-shipment inspection (AQL 2.5 major / 4.0 minor).
- Confirm Incoterm (FOB port), lead time, and who books freight; get FBA labelling done at factory.

8. Next steps

1. Confirm HTS code and current Section 301 status with a customs broker (largest swing factor in margin).
2. Run design-patent search on the final shape/pattern (USPTO, Google Patents).
3. Shortlist 3 suppliers from the hubs above; request quotes for your exact spec and sample units.
4. Book the compliance tests in Section 3 on the chosen sample (budget and timeline shown).
5. Place a small first order (at or near MOQ), inspect before shipment, launch, then scale.

Methodology: public web pages only, no logins, no anti-bot bypass, no personal data. Sources graded by type: government/official > lab price pages > supplier sites (self-reported, biased) > blogs.

9. EU Listing Information Checklist (GPSR, Regulation (EU) 2023/988)

Information checklist only. This is not legal advice or a compliance assessment. Verify with a qualified professional before selling in the EU.

Information checklist only - does not mean the product is compliant. If the manufacturer is not established in the EU, an EU Responsible Person is required.

A. Shown on the online listing (distance sales, Art. 19)

#	Required information	Article	Your product
1	Manufacturer name, registered trade name or trademark, postal address and electronic contact	Art. 19(a)	
2	If the manufacturer is outside the EU: name, postal address and electronic contact of the EU Responsible Person	Art. 19(b), Art. 16(1)	
3	Product identification: picture, product type and any other product identifier	Art. 19(c)	
4	Warnings or safety information, in a language easily understood by consumers in the member state where it is sold	Art. 19(d)	

B. On the product, packaging or accompanying document

#	Required information	Article	Your product
1	Type, batch or serial number, or other identifying element	Art. 9(5)	
2	Manufacturer name, trade name or trademark, postal address and electronic contact	Art. 9(6)	
3	Importer name, trade name or trademark, postal address and electronic contact	Art. 11(3)	
4	EU Responsible Person name and contact details	Art. 16(3)	
5	Instructions and safety information in a language the consumer can easily understand (unless the product can be used safely without them)	Art. 9(7), Art. 11(4)	

C. Reminders (we do not produce these)

- The manufacturer keeps an internal risk analysis and technical documentation for 10 years (Art. 9(2), 9(3), 11(6)).
- The manufacturer provides a public complaints channel (Art. 9(11)).
- If the manufacturer is not in the EU, budget for an EU Responsible Person: market price roughly EUR 150-1,190 per year, per public comparison pages (checked 2026-10-22).

10. Category Inspection Checklist (free, included in every report)

AI-assisted, for reference only. Category points are generated from your product description and public information. They are a starting point for your own inspection spec, not a certification, test report or statement of conformity to any standard. Agree final criteria in writing with your supplier and inspector.

A. Dimensions & weight

- Head, arm and base dimensions vs. sample; arm reach and fold angle
- Cord length vs. spec
- Weight (stability of base)

B. Materials & workmanship

- Housing material and finish match sample; no cracks
- Cord jacket marking and plug type correct for market
- Light-diffuser free of bubbles/yellowing

C. Function & on-site tests

- Power on 100% of sampled units; all dimming steps and touch control respond
- USB-A output under load (e.g. 5 V / rated current)
- Hi-pot / earth-continuity check by inspector where equipment available
- Run for 30-60 min; no flicker, abnormal heat or smell

D. Packaging & labelling

- Rating label: voltage, wattage, model, manufacturer; FCC statement
- CE / UKCA marks only if DoC exists; WEEE bin symbol for EU
- Manual with safety warnings in English (+German for DE)
- FBA label, carton drop test

E. Common defects by class

Class	Typical defects for this category
Critical	• Exposed live part / failed hi-pot • Overheating, smoke or burning smell • Missing or false safety/regulatory marking
Major	• Lamp does not light / a dimming step fails • Touch control intermittent • USB port no output • Arm does not hold position • Cracked housing
Minor	• Light scratch on base • Small colour difference between parts • Minor print defect on box

F. Sampling plan (reference: MIL-STD-105E)

Suggested: General Inspection Level II, single sampling, normal inspection. Suggested AQL: Critical 0 (no critical defect accepted), Major 2.5, Minor 4.0. Ac = accept if defects found $\leq$ Ac; Re = reject if $\geq$ Re.

Lot size (units)	Code letter	Sample size	Critical (AQL 0)	Major AQL 2.5 Ac/Re	Minor AQL 4.0 Ac/Re
151-280	G	32	0/1	2/3	3/4
281-500	H	50	0/1	3/4	5/6
501-1,200 ← your est. lot	J	80	0/1	5/6	7/8
1,201-3,200	K	125	0/1	7/8	10/11
3,201-10,000	L	200	0/1	10/11	14/15

Your estimated lot = 3 months of stock = 600 units -> code letter J, sample 80 units. Values from the MIL-STD-105E tables (Table I code letters; Table II-A single sampling, normal); have your inspection company confirm the plan. MIL-STD-105E is a cancelled US military standard still widely used as a commercial sampling reference.

Appendix: data quality notes

- Only one listing (Zhongshan Huapai via Tradewheel) showed an FOB price; Made-in-China pages for lamps mostly hide prices.

- Cert costs come from a single Chinese lab page (meidetest) quoted in CNY.
- Supplier websites are self-reported marketing and may overstate capacity/certifications.
- Duty rates are assumptions pending HTS classification; Section 301 list membership not verified per code.