PHOTOLAB CHEAT SHEET

Composition - starting points, not laws

- **Rule of thirds:** 3×3 grid – the four crossing points are good places for the main subject; off-centre looks less static.
- **Horizon:** level, usually above or below the middle – centred for a reflection.
- **Leave room** on the side people and animals face or move towards.
- **Lines** (paths, rivers, fences) lead the eye; a doorway or window frames. **Move** lower or higher than eye level; blurred or empty background ("negative space").

Nikon and Canon both say the rules may be broken.

Light: direction and quality

front	texture played down – kind to skin
side	deeper, longer shadows: texture, volume – the more from the side, the more texture
behind	face in shadow ⟶ a little flash keeps the bright rim: **fill-in flash**

- Shadow edge crisp = **hard** (deeper shadows, more contrast, texture), fuzzy = **soft**.
- Source large **relative to the subject** = soft, small = hard. Same softbox closer = softer (and needs less power). Bounced flash: more flattering than direct.

Colour temperature & white balance

Lower kelvin = redder, higher = bluer. Nikon presets, approx.:

BULB	DIRECT SUN	FLASH	CLOUDY	SHADE
3000 K	5200 K	5400 K	6000 K	8000 K

ISO/CIE 11664-2:2022: A (tungsten filament) ≈ 2856 K · D65 (average daylight) ≈ 6500 K · D50 ≈ 5000 K. Photographic tungsten lamps often 3200 K (Adobe).

- **Temp** blue ↔ yellow (lower it for warmer, lower-kelvin light) · **Tint** green ↔ magenta · or click the WB tool on a neutral light grey (not a specular highlight).
- Raw: 2,000–50,000 K · JPEG/TIFF: only –100 to +100 (already baked in).
- Mixed light, flash ≈ 5400 K + bulbs ≈ 3000 K: one setting cannot neutralise both. SB-700 filters (incandescent, fluorescent) bring the flash closer to that light.

Flash

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GN = distance (m) × f-number (ISO 100)
reach = GN ÷ f-number
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SB-700, GN 28: f/4 ⟶ 7 m, f/8 ⟶ 3.5 m · built-in, GN 12: f/4 ⟶ 3 m · ISO 200: GN 39 (≈ ×1.4, one stop). ISO 1230: how the GN is determined; Nikon's 28 is for the 35 mm zoom position (FX) – compare like with like.

DISTANCE	1 m	1.4 m	2 m	4 m
light	1	≈ ½	¼	1/16
stops	0	–1	–2	–4

Inverse-square law (point source). Person 1 m, wall 2 m: wall two stops darker. Person 3 m, wall 4 m: $(3/4)^2 \approx 0.56$, about 0.8 stop – more even, but the source is relatively smaller, so harder.

Fill flash: Canon Speedlites cut output in bright light by up to 1.5 stops (2 with E-TTL/E-TTL II) at EV 13+; sync 1/90–1/250 s by camera. Too little: dark shadows, too much: artificial.

Rights in pictures - no legal advice

German law, wording checked October 2026 – orientation only, not how courts apply it in your case. For a real case, ask a lawyer.

People (KUG)

§ 22: portraits only distributed or shown in public with **consent**. Paid for posing ⟶ counts as given in case of doubt. For ten years after death: the relatives decide.

§ 23 (1) – without consent it can be fine for (each lifts only the need for consent):

1	portraits from contemporary history
2	people only as an accessory beside a landscape or place
3	assemblies, processions etc. – those who took part
4	portraits not made to order – higher interest of art

§ 23 (2): never if it harms a legitimate interest of the person shown.

Taking ≠ publishing. KUG = publishing; taking can fall under the GDPR (DSGVO) – for the Baden-Württemberg authority every photo showing a person is personal data. Purely private photos exempt, a freely accessible website not. How KUG and GDPR relate is **disputed**.

Places and your own photos (UrhG)

§ 59: works **permanently** on public paths, streets, squares – photographing and publishing OK; buildings only the **outside**; copies not made on a building. BGH 23.10.2024 (I ZR 67/23): drone photos of protected works not covered by § 59 (case: a book).

	LICHTBILDWERK	LICHTBILD
law	§ 2 (1) No. 5, (2)	§ 72
needs	"personal intellectual creation"	a photo (or similar)
term	70 years after the author's death	50 years after publication*

From the end of the calendar year (§ 69): died 1960 ⟶ until end of 2030. *Or an earlier first lawful public communication; neither within 50 years ⟶ 50 years after it was made. § 13: author decides on the credit (via § 72 for Lichtbilder too). § 51: quoting, if the extent is justified by the purpose.

Model release

- GDPR consent need not be written, but must be **provable** – document it.
- Minors: parents or guardians consent. Consent can be withdrawn at any time – say so beforehand.
- A contract (e.g. wedding couple) covers that party – not automatically the guests.

Sources: Nikon, Canon (composition, light, flash) · Profoto · Nikon Z 30 & SB-700 manuals · Adobe Lightroom help · ISO/CIE 11664-2:2022 · ISO 1230 · HyperPhysics (GSU) · KUG §§ 22, 23 · UrhG §§ 2, 13, 51, 59, 64, 69, 72 · BGH I ZR 67/23 · Bundestag WD 10 (2018) · LfDI Baden-Württemberg (2019). Details: adubta-music.de/fotolabor.html