Art rooms

Lux: 750

Glare: 19

Uniformity: 0.70

CRI: 90

Color temperature: 5000K: 6500K

Kitchen

Lux: 500

Glare: 22

Uniformity: 0.60

CRI: 80

The recommended color temperature ranges for different school rooms are as follows:

- **Discussion Room:** Neutral to cooler white light around 3500K to 4500K is ideal. This range supports clear communication and alertness without being too harsh.
- **Canteen (Cafeteria):** Slightly warmer light, typically between 3000K to 3500K, is preferred to create a relaxing and comfortable atmosphere for eating and socializing.
- **Dressing Room:** Warm white light around 2700K to 3000K is desirable to provide flattering, comfortable lighting that is gentle on skin tones and avoids harshness.
- **Computer Lab:** Cooler white light in the 4000K to 5000K range is used to enhance focus and reduce eye strain during screen work. This range also mimics daylight for better alertness

Space Type	Em (avg illuminance)	UGR ≤	CRI Ra ≥	Notes
Classrooms / Tutorial Rooms	300 lx	19	80	Lighting controllable
Evening / Adult Education Classrooms	500 lx	19	80	Adjustable control
Lecture Halls	500 lx (750 lx demo)	19	80	Higher for demo areas
Computer Practice Rooms (e-learning)	300 lx	19	80	DSE-work clause applies
Canteens / School Canteens	200 lx	22	80	Ambient/tourist area
Practice Labs / Science Rooms	500 lx	19	80	Practical-use lighting
Teachers' / Prep Rooms, Common Rooms	300 lx (common rooms 200 lx)	19–22	80	Depending on use
Corridors	100 lx	25	80	Circulation areas
Stairs	150 lx	25	80	Safety-critical

Room Type	Em-lux	UGR ≤	CRI Ra	CCT (approx.)	Uniformity
Classroom / Discussion Room	300	19	≥ 80	~4000–5000 K	≥ 0.7
Computer Lab	300	19	≥ 80	~4000–5000 K	≥ 0.7
Canteen / Common Room	200	22	≥ 80	~3500–4500 K	≥ 0.6–0.7
Dressing / Prep Room	300-500	19	≥ 80 (or 90)	~4000–5000 K	≥ 0.7

COMPUTER ROOM

The computer competence is assigned such a great importance today as the knowledge of foreign languages or natural sciences. Therefore, today computers are an inseparable part of the educational process.

The rooms where the lessons on the PC screens take place have increased demands on the illumination of the space. Besides the main lighting it is important to think about the correct vertical illumination of the walls and ceiling of the computer room. The package with recommendations of the British designers – Lighting Guide 7 (LG 7) – states the ratio 50 % for the illumination value of the vertical surfaces compared with the working plane, for illuminating the ceilings 30 % of the working plane illuminance. The suspended linear luminaires with the direct and indirect radiation of the luminous flux are an ideal solution for this type of space.

Compared with other classrooms in the computer room it is very important to prevent undesirable glare and reflection on the screens. The optimal conditions can be achieved by the sufficient shielding of the light sources and correct layout of the luminaires. In the rooms with availability of daylight it is due to the same reason to fit the windows with systems of curtains or blinds. The minimal shielding angles of the light sources and the value of the psychological glare admissible for the computer rooms are adapted by the European standard EN ISO 9241-307.

The interactive teaching process in the computer rooms where the vision is permanently transferred from the PC monitor to the teacher and vice versa requires a uniform distribution of brightness in the room. Too much of a contrast luminance in the individual levels of the space could represent a burden

for the eyes and could cause fast fatigue of the pupils. If the computer room is equipped with a projection screen and an overhead projector and the teaching process is realized through multimedia presentations, it is important to dim the lighting to the required intensity or to switch off completely part of the lighting system.

As the computer rooms are spaces without a permanent occurrence of persons, it is suitable to consider some tools of the lighting management system due to energy savings.