WHAT IS LG7?

FACTS & FIGURES

- Founding year: **1912**
- Legal form: **GmbH & Co. KG** (limited liability company)
- Consolidated annual turnover 2015: **600 million euros**
- Global employees: **> 5,000**
- Business partners and subsidiaries: **34 and 12**
- Service subsidiaries: **> 50 countries**

MAY I INTRODUCE MYSELF

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Business Development Director

International Projects

Akademie Presenter

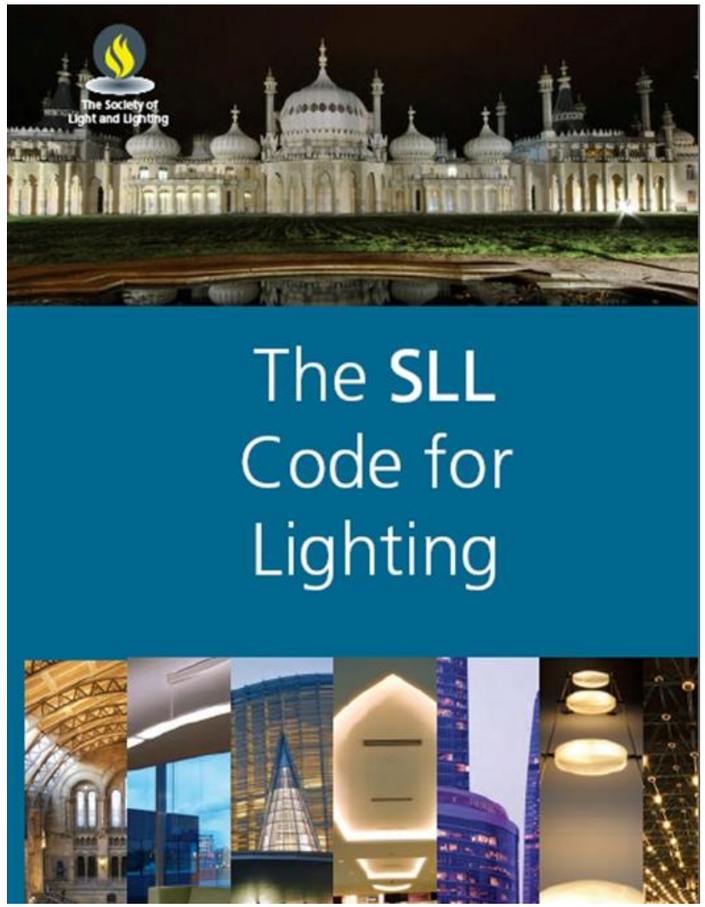
Fellow of The Society of Light and Lighting

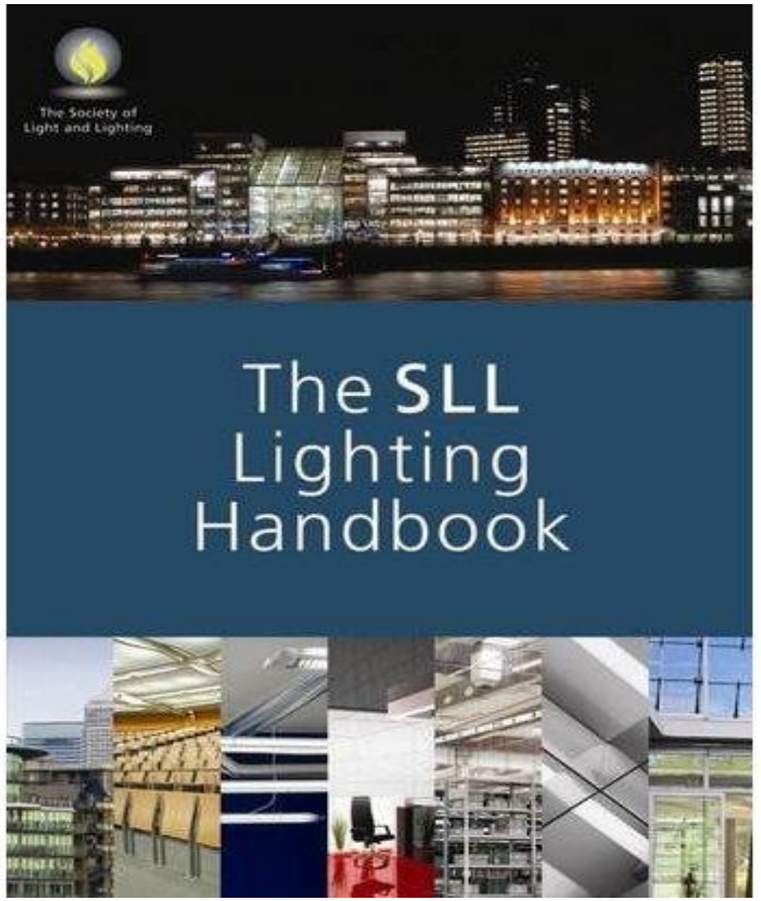
BSI and ISO TC

WHAT IS LG7?

PUBLISHED BY THE SOCIETY OF LIGHT AND LIGHTING

PART OF CIBSE



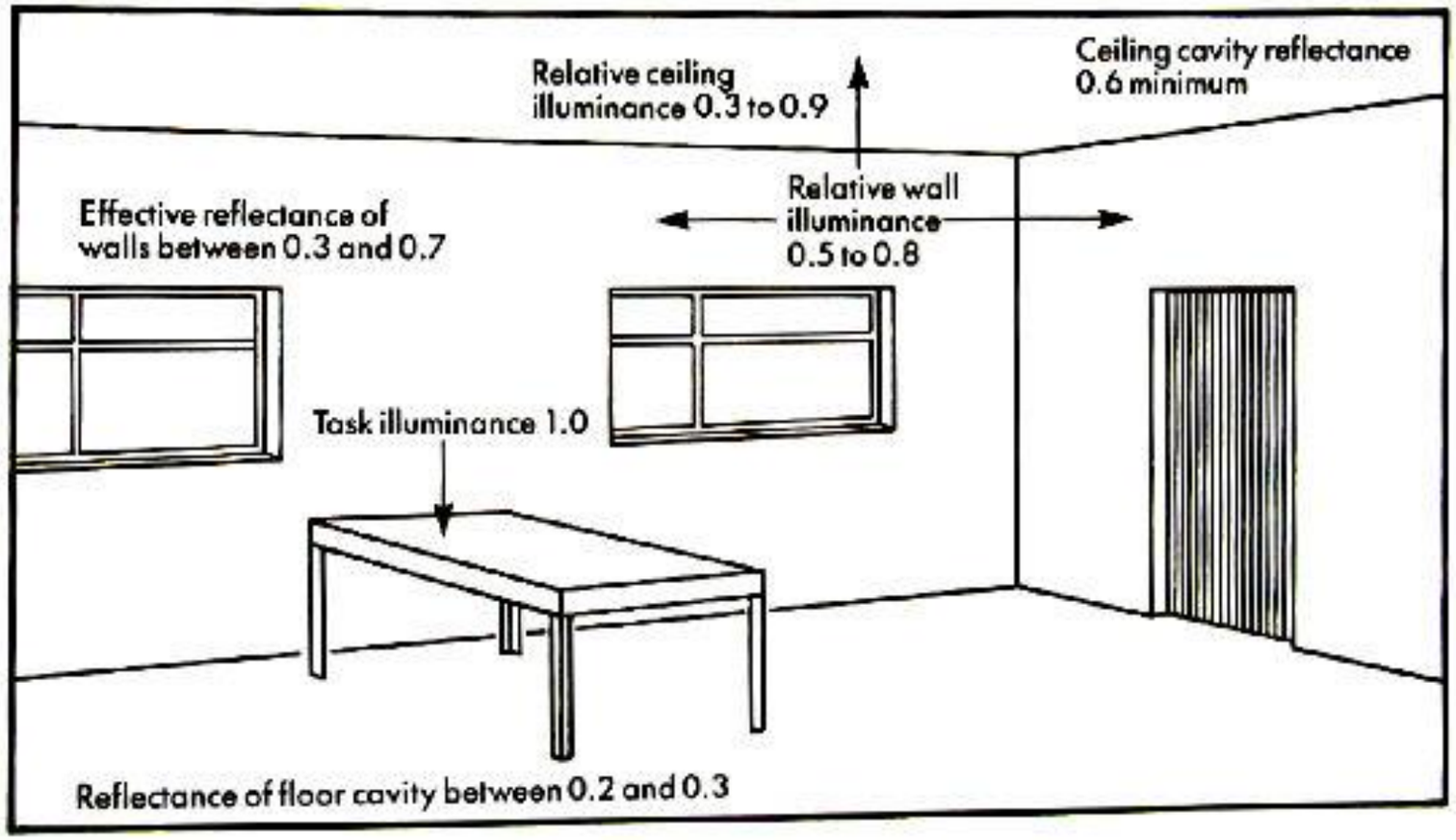


TRILUX AKADEMIE

PREVIOUS EDITION OF LG7

Lighting Guide 7:
Office lighting

The Society of
Light and Lighting



Skype HQ
GIA Equation

WHAT IS THE TASK?

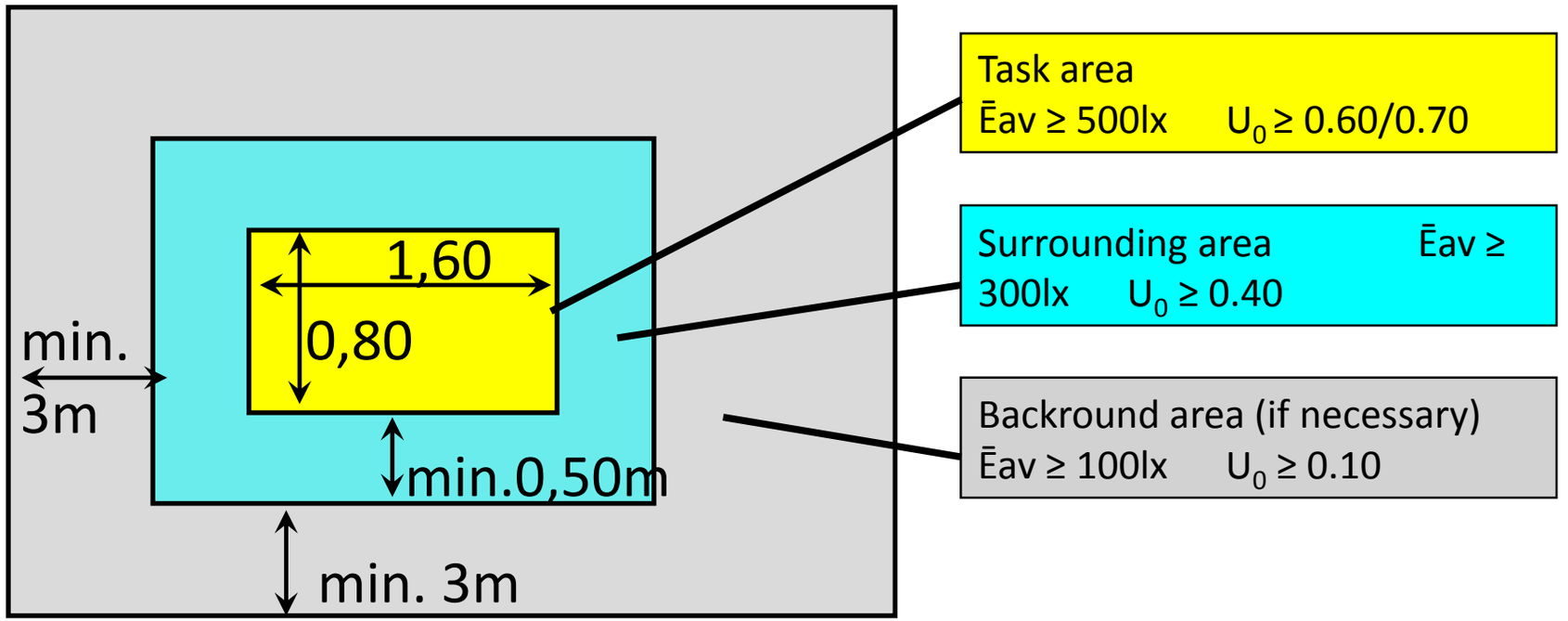
CORRECT LEVELS FOR THE TASK

Table 2.30 Offices

Ref No.	Type of area, task or activity	$\bar{E}_m$ / lx	UGR_L	U_o	R_a	Specific requirements
2.30.1	*Filing, copying, etc*	*300*	*19*	*0.40*	*80*	
2.30.2	*Writing, typing, reading, data processing*	*500*	*19*	*0.60*	*80*	*DSE work, see* 2.1.9
2.30.3	*Technical drawing*	*750*	*16*	*0.70*	*80*	
2.30.4	*CAD work stations*	*500*	*19*	*0.60*	*80*	*DSE work, see* 2.1.9
2.30.5	*Conference and meeting rooms*	*500*	*19*	*0.60*	*80*	*Lighting should be controllable*
2.30.6	*Reception desk*	*300*	*22*	*0.60*	*80*	
2.30.7	*Archives*	*200*	*25*	*0.40*	*80*	For filing, the vertical surfaces are especially important

HOWEVER THERE ARE MORE ASPECTS WE MUST CONSIDER

Example of illumination of desk area



VERTICAL SURFACES

CYLINDRICAL ILLUMINANCE

GLARE

Table 6.2 Luminance limits

Screen high state luminance	High luminance screen (L > 200 cd/m²)	Medium luminance screen (L < 200 cd/m²)
Case A (positive polarity and normal requirements concerning colour and detail of the displayed information as used in office, education, etc.)	<3000 cd/m²	<1500 cd/m²
Case B (negative polarity and/or higher requirements concerning colour and detail of the displayed information as used for CAD, colour inspection, etc.)	<1500 cd/m²	<1000 cd/m²

LIGHTING CONTROLS

ENERGY USE

Luminaire Lumens per circuit watt

Lighting Energy Numeric Indicator - **LENI**

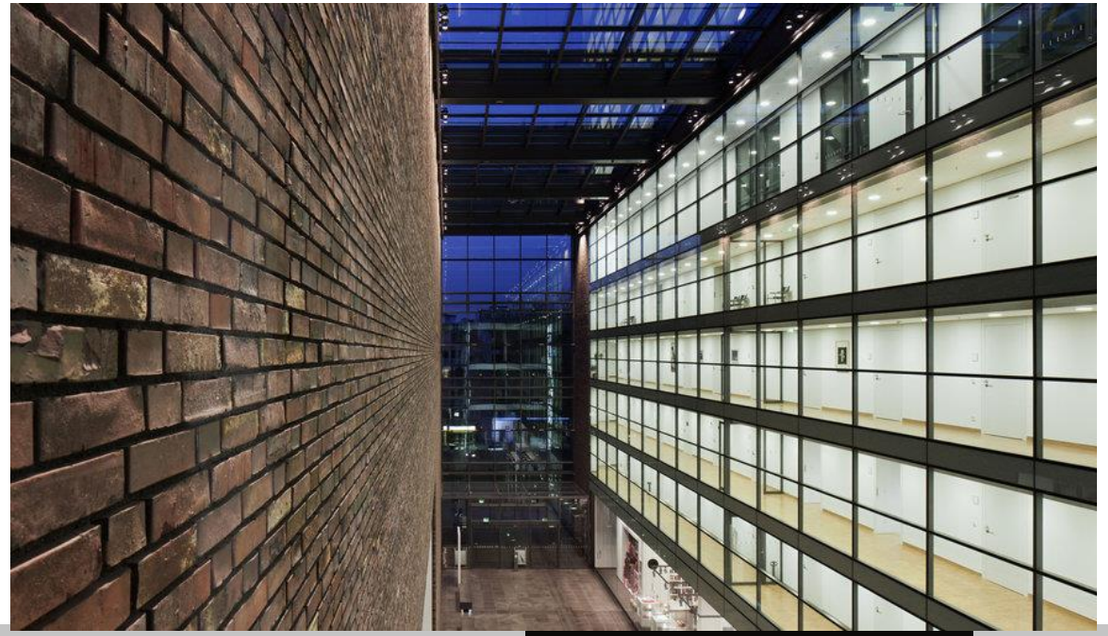
$$\frac{\text{Daytime + night time + parasitic loads}}{\text{Floor area of the building}} = \text{kWh / m}^2$$

OTHER INFLUENCING FACTORS

THE ARCHITECT

OTHER INFLUENCING FACTORS

THE INTERIOR DESIGNER



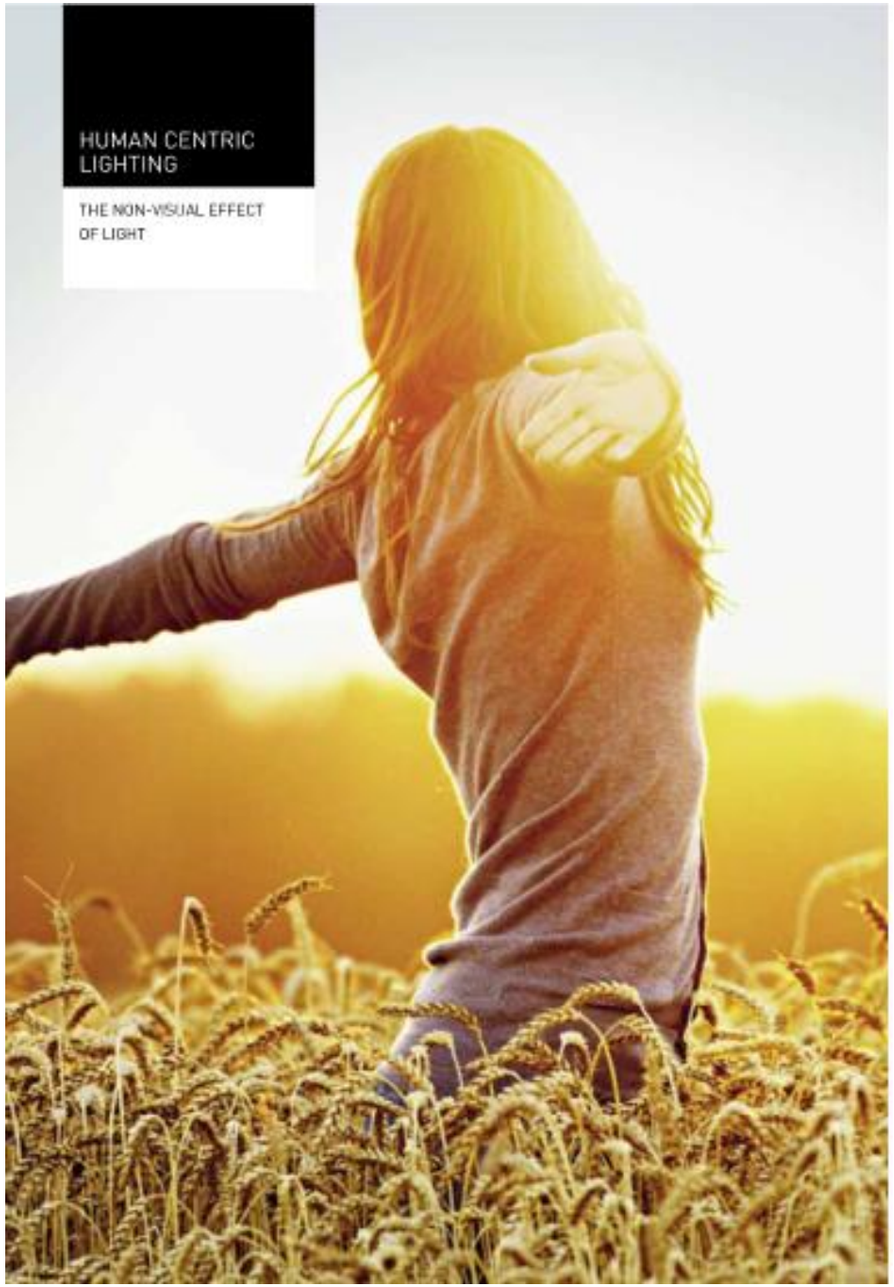
OTHER INFLUENCING FACTORS

ENGINEERS

Table 7.1 Typical operating temperatures of common lighting sources and chilled services

FCU air supply	Typically 6–8 °C below the ambient temperature in the space to be cooled
Chilled beam surface temperature	Typically 14–18 °C
T5 lamp optimum operating temperature	Typically 35 °C around the lamp
T8 lamp optimum operating temperature	Typically 25 °C around the lamp
LED optimum operating temperature	Typically 25 °C

HEALTH AND WELLBEING



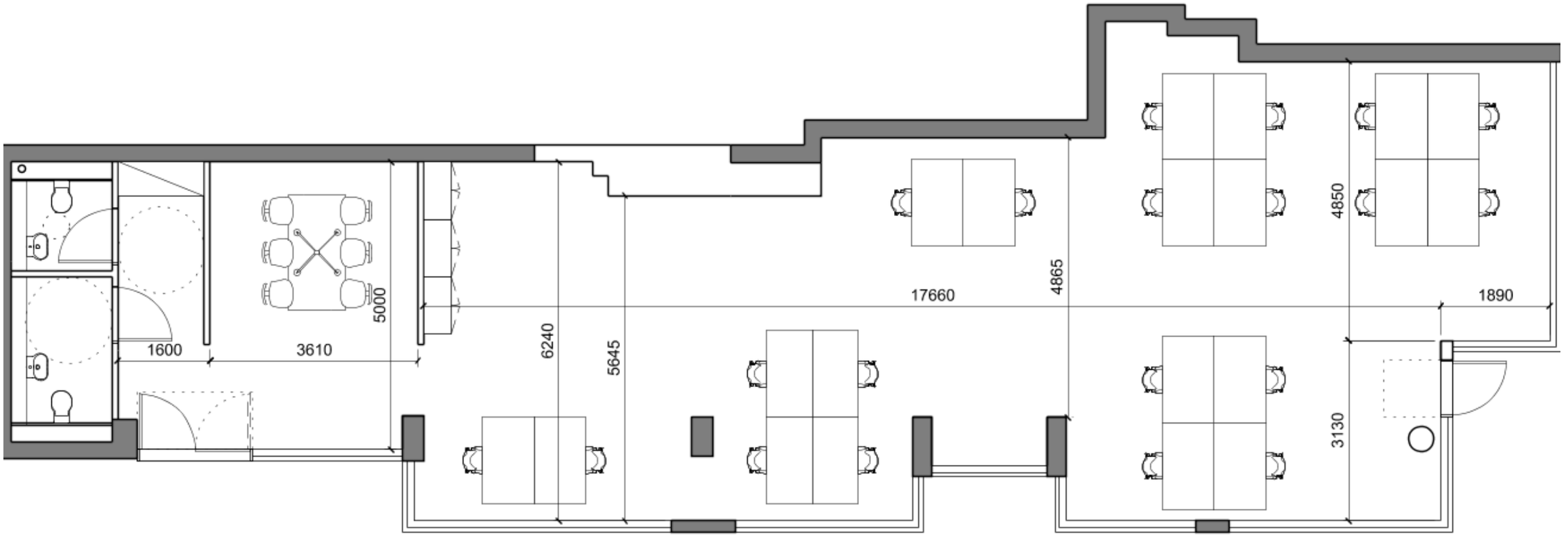
THE SPEC OFFICE

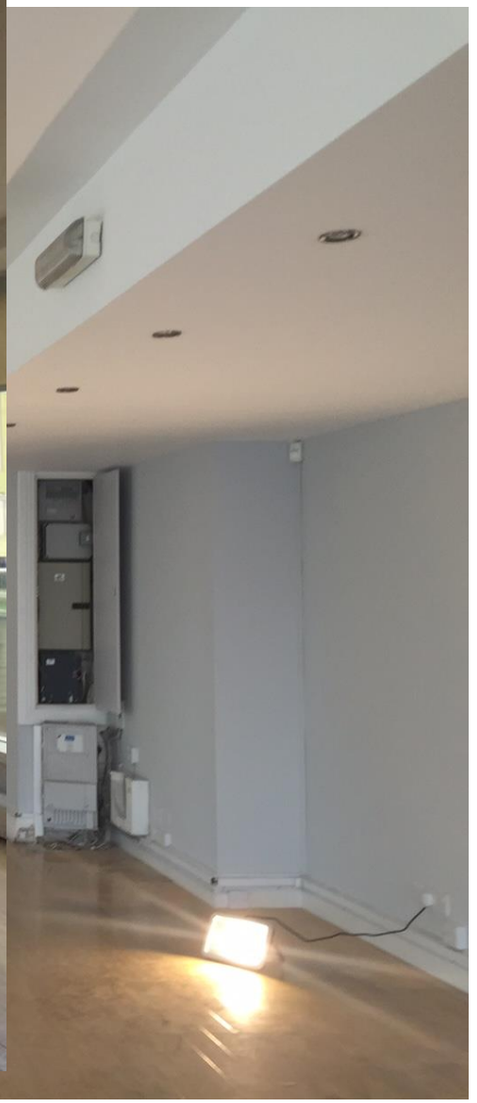
A PRACTICAL EXAMPLE

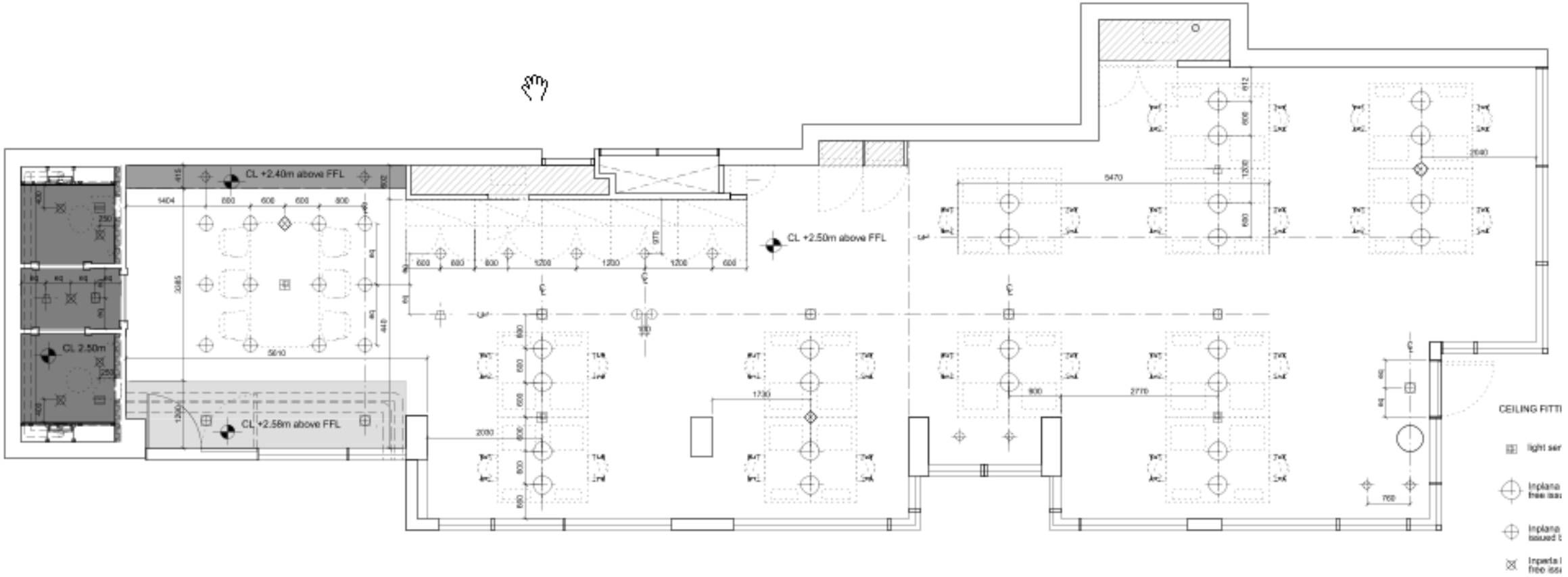
CASE STUDY

ALBERT BRIDGE HOUSE

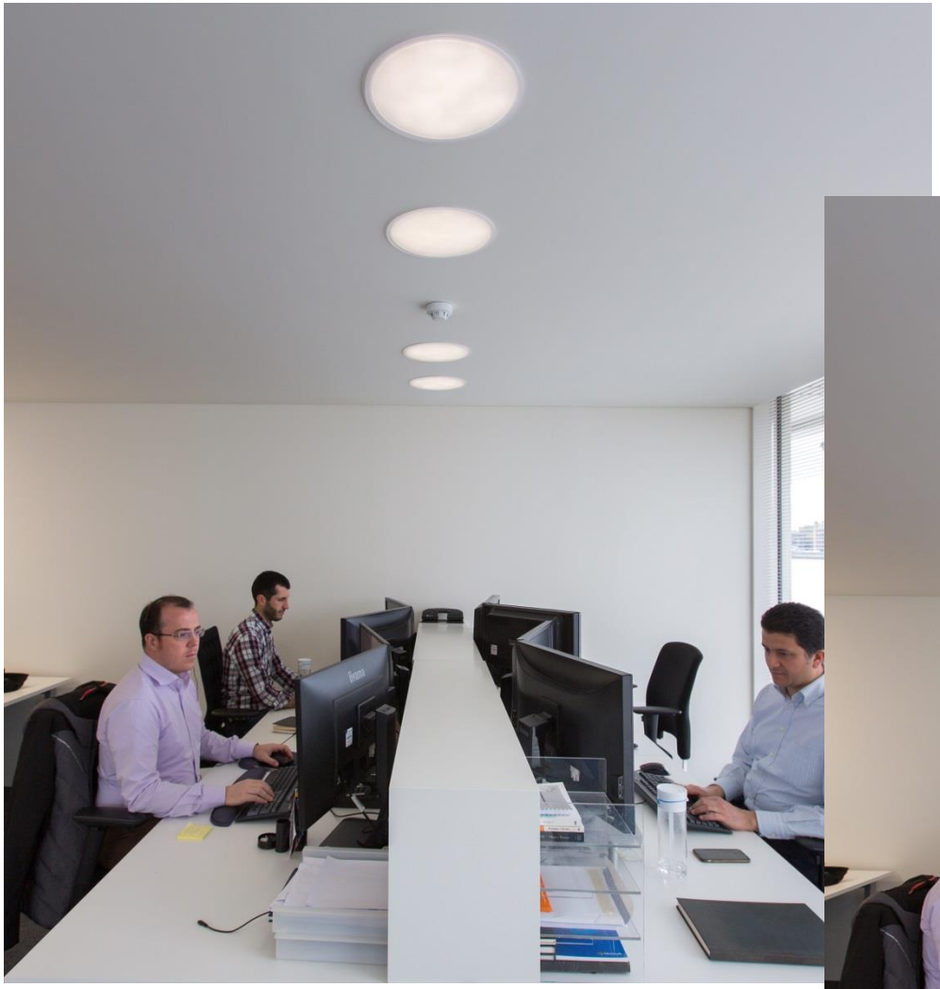
FOSTER + PARTNERS

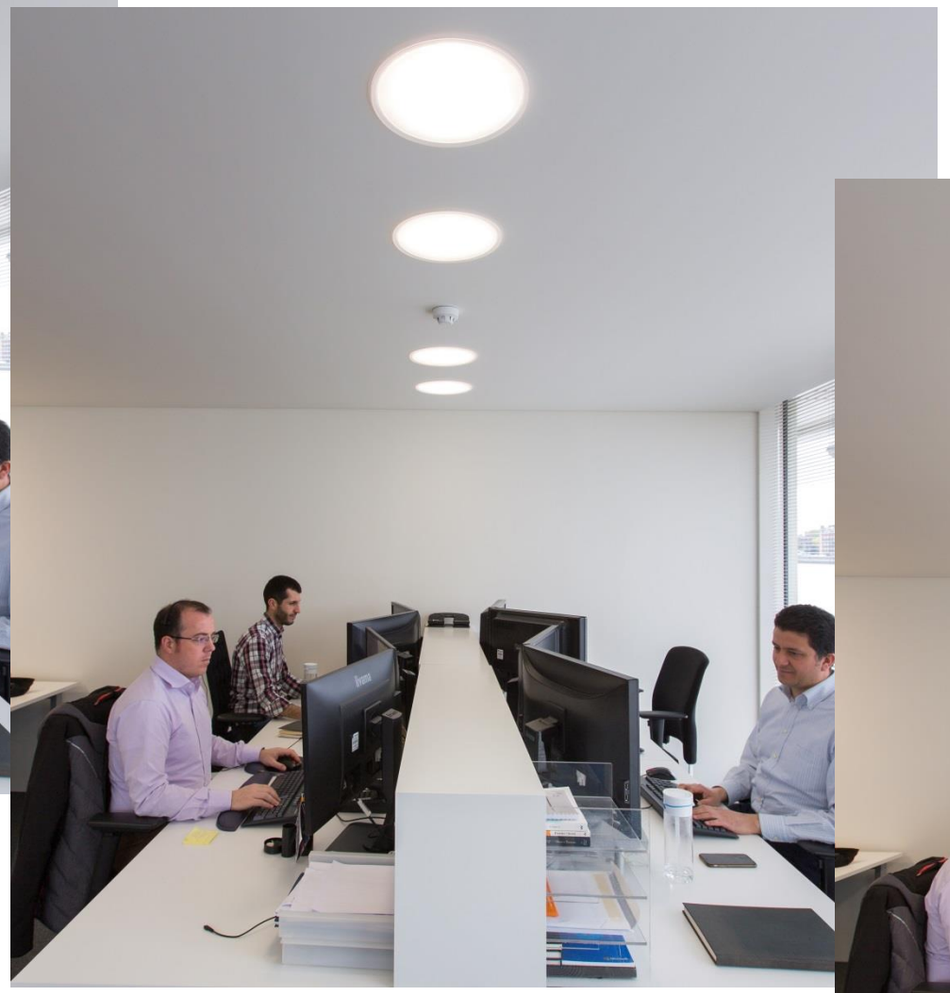

1600
3610
5000
6240
5645
17660
4865
4850
1890
3130

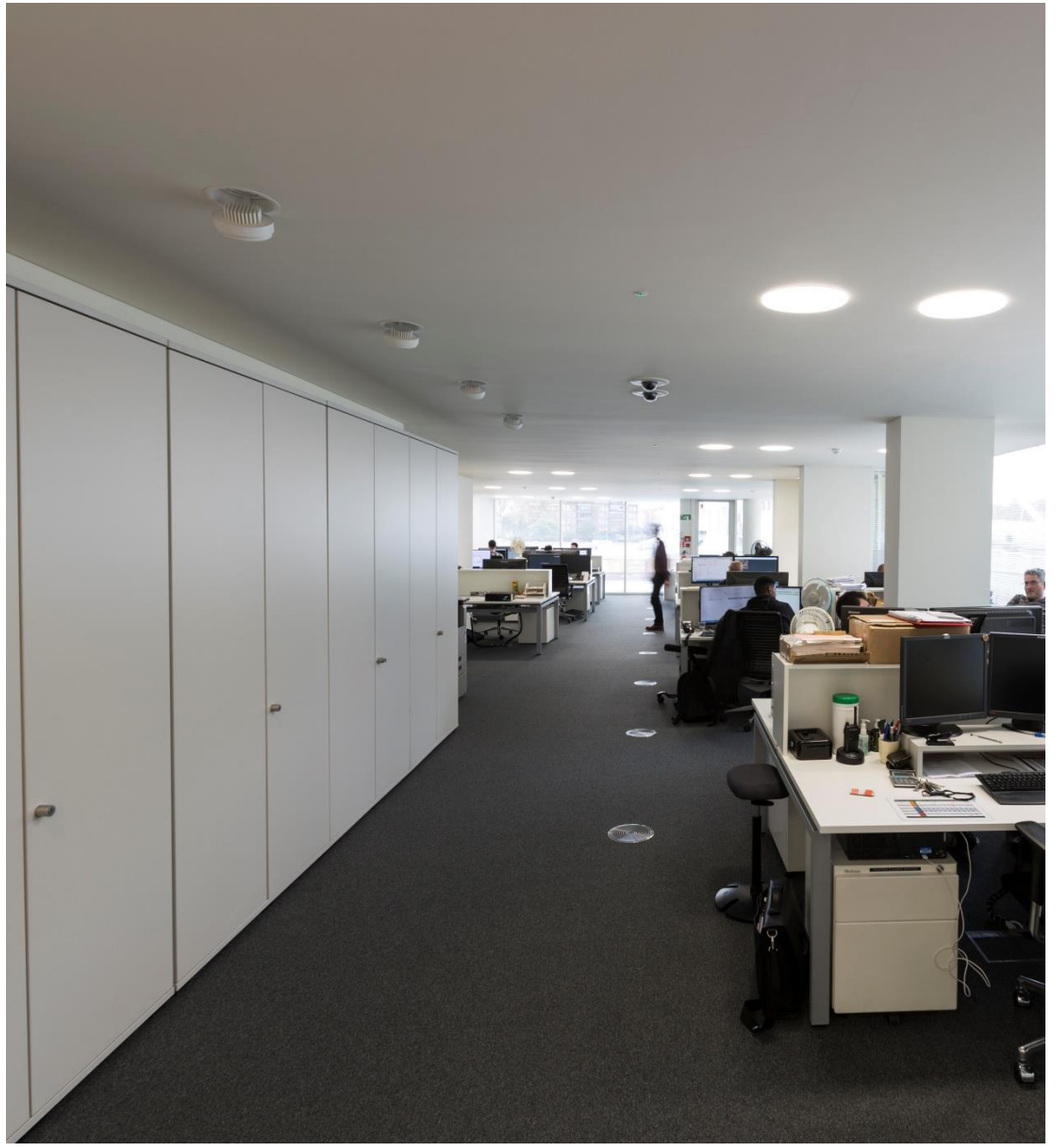



CL +2.40m above FFL
CL +2.50m above FFL
CL +2.58m above FFL
CL 2.50m
CEILING FITTI

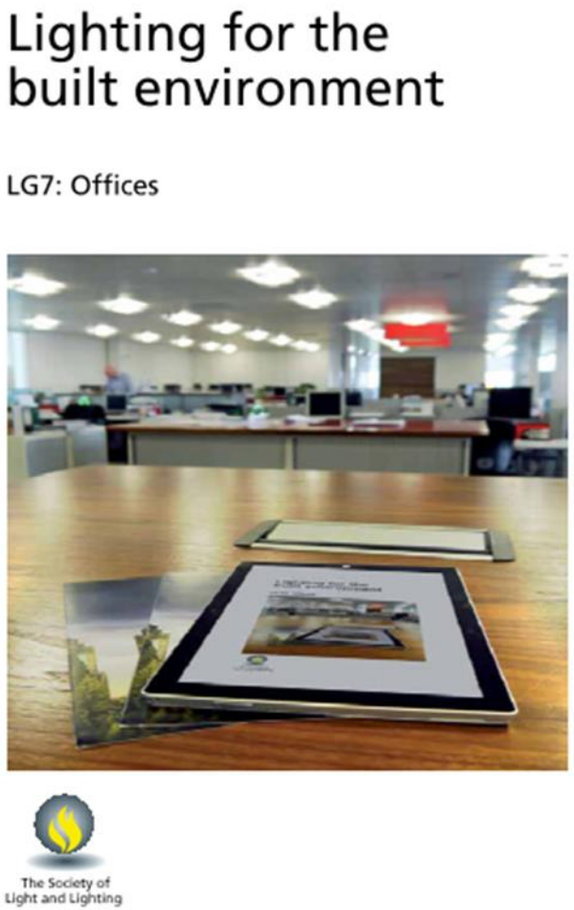

DICTIONARY

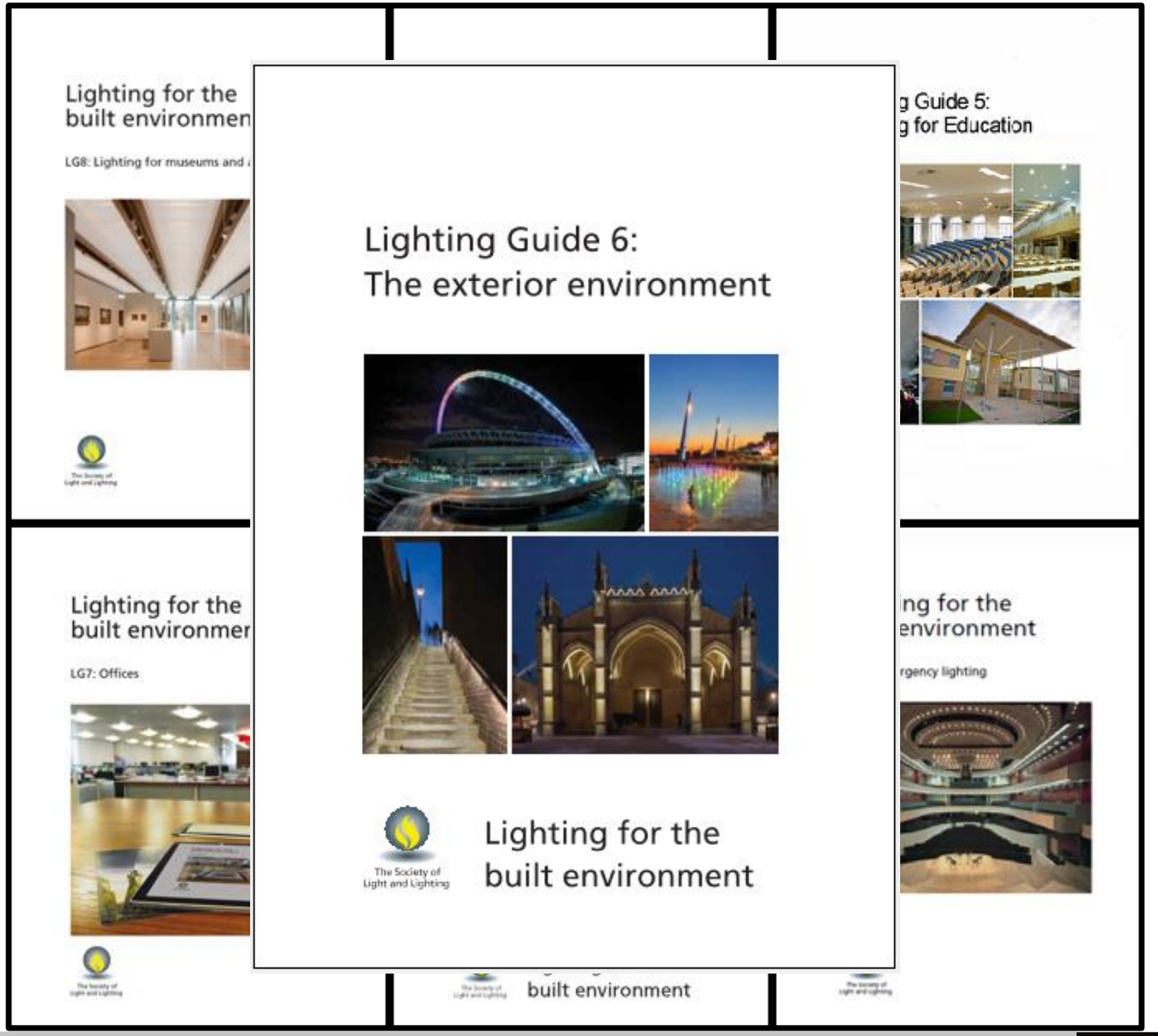






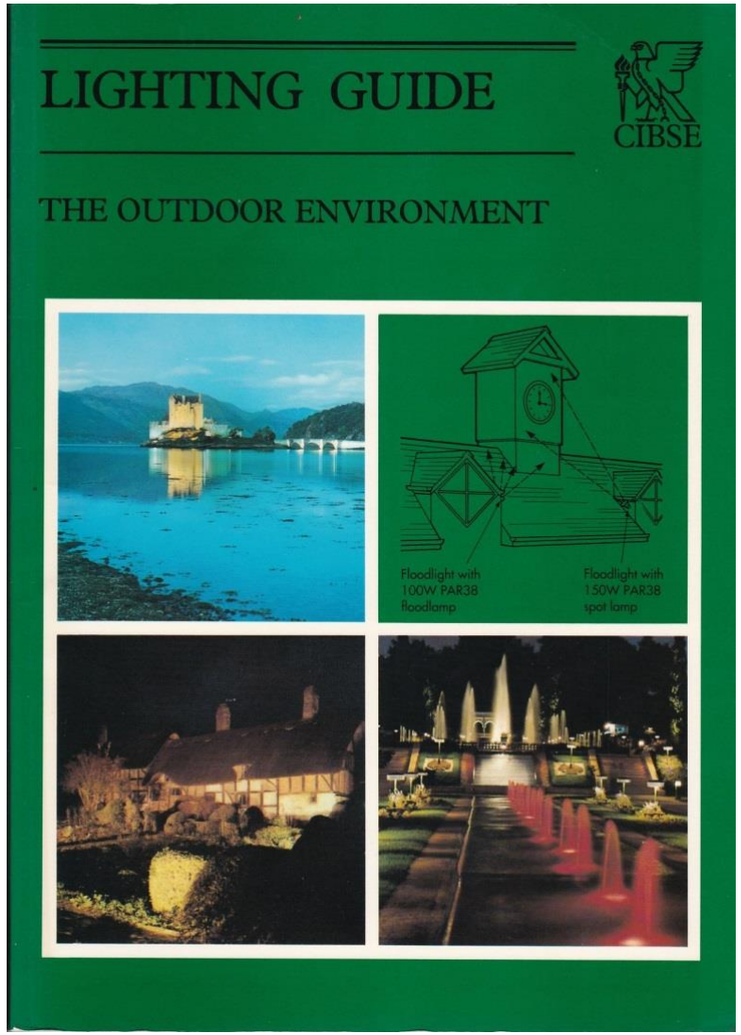
WILL YOU READ IT?





TRILUX AKADEMIE

PREVIOUS EDITION OF LG6



- Published in 1992

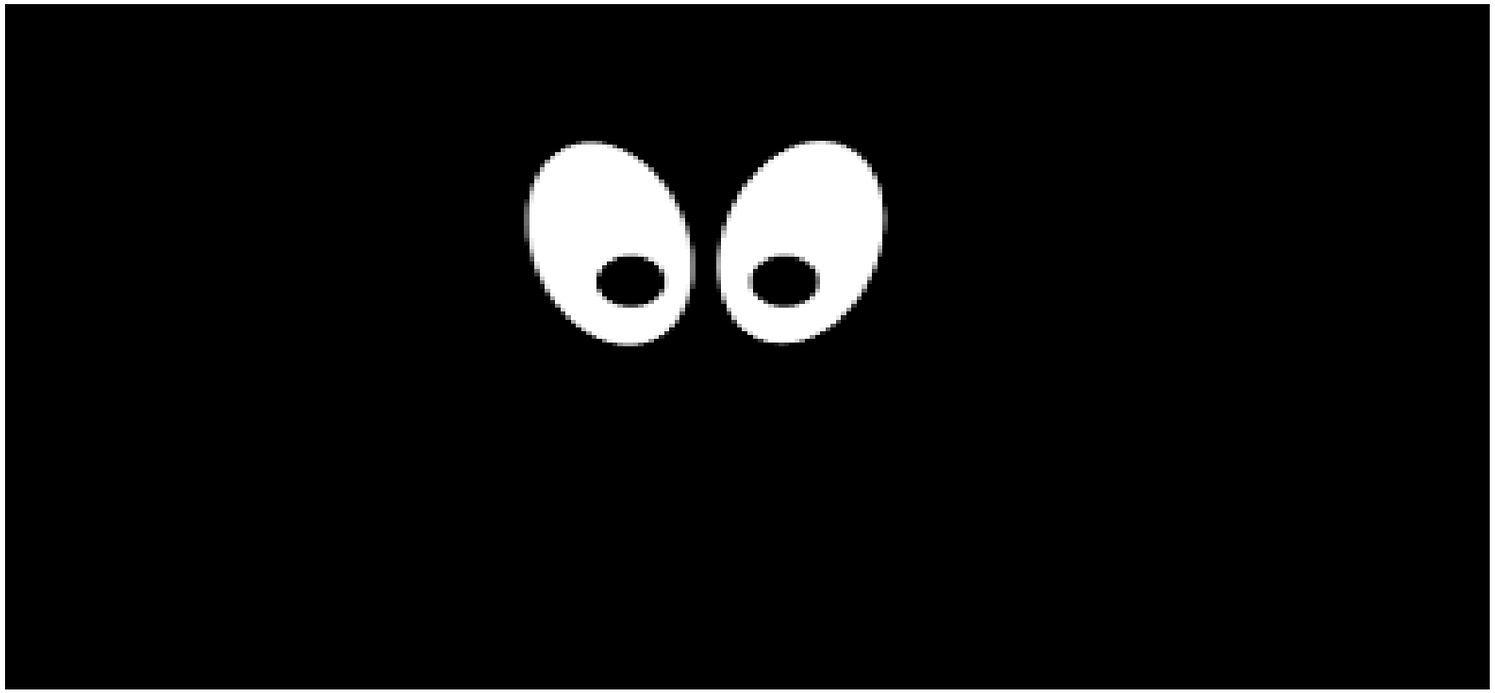
PUBLISHED IN 2016

STRUCTURE OF THE NEW LG6

- General Design aspects – Masterplans, Views & Vistas, Environmental aspects, Legislation.
- General techniques – Landscapes, facades, open areas such as car parks, security lighting, Roadways.
- Specific applications
- Appendix, Bibliography etc

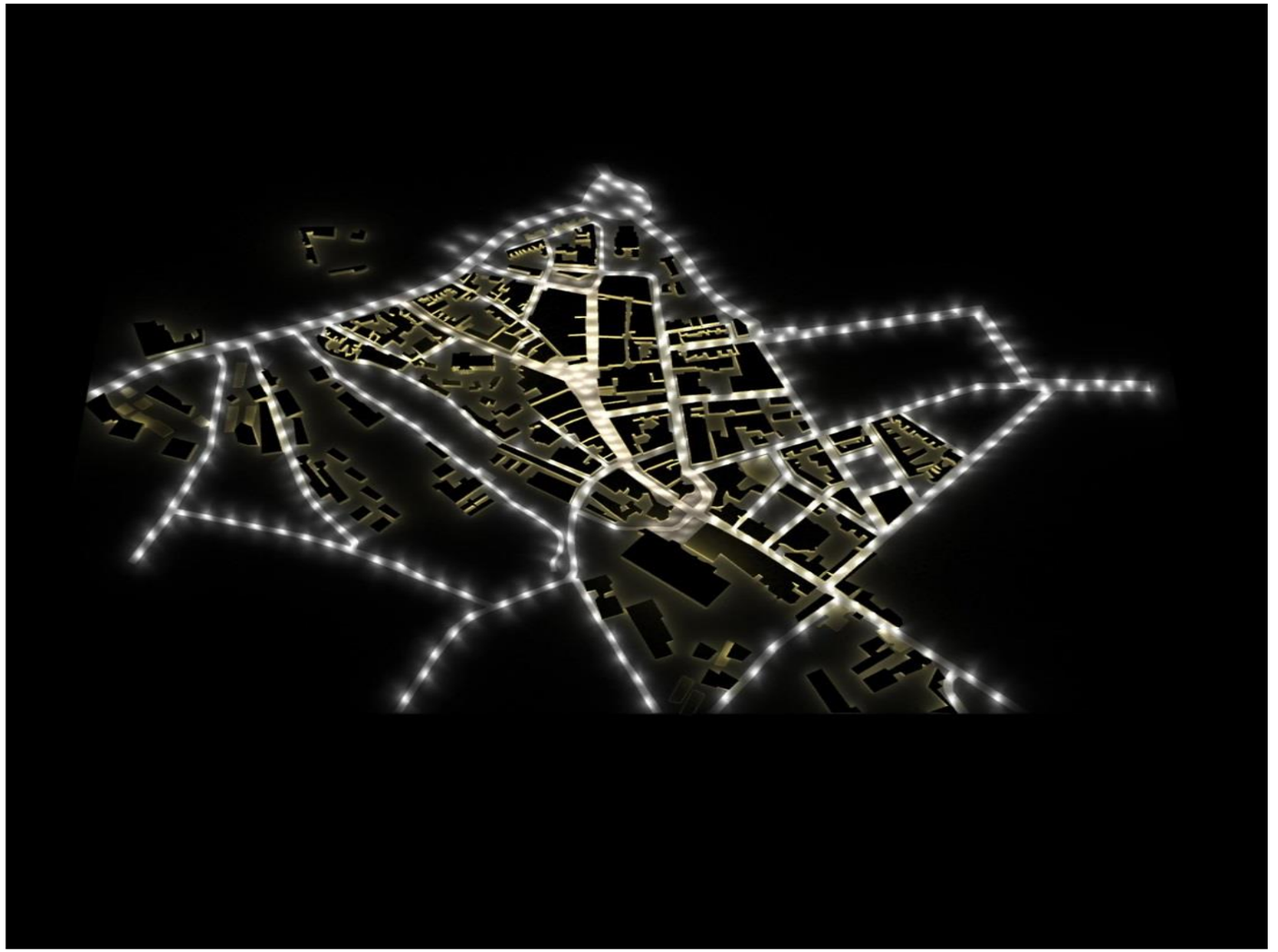
ADDITIONS

Vision



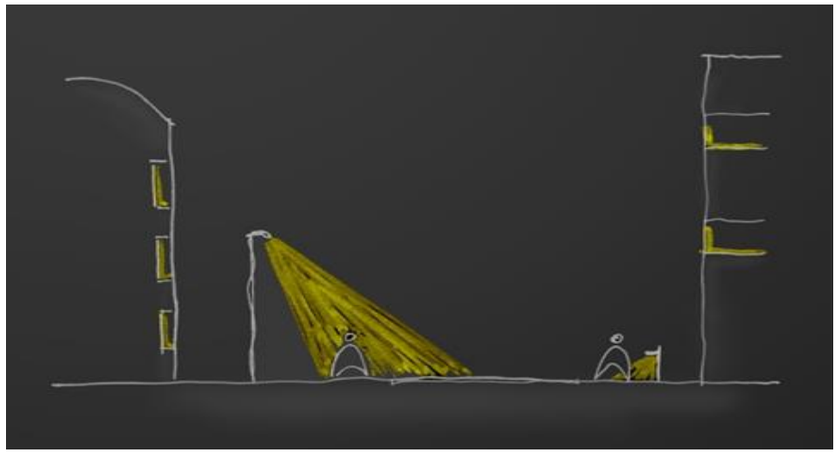
ADDITIONS

Masterplans and Nightscape strategies



ADDITIONS

Software and visualisations

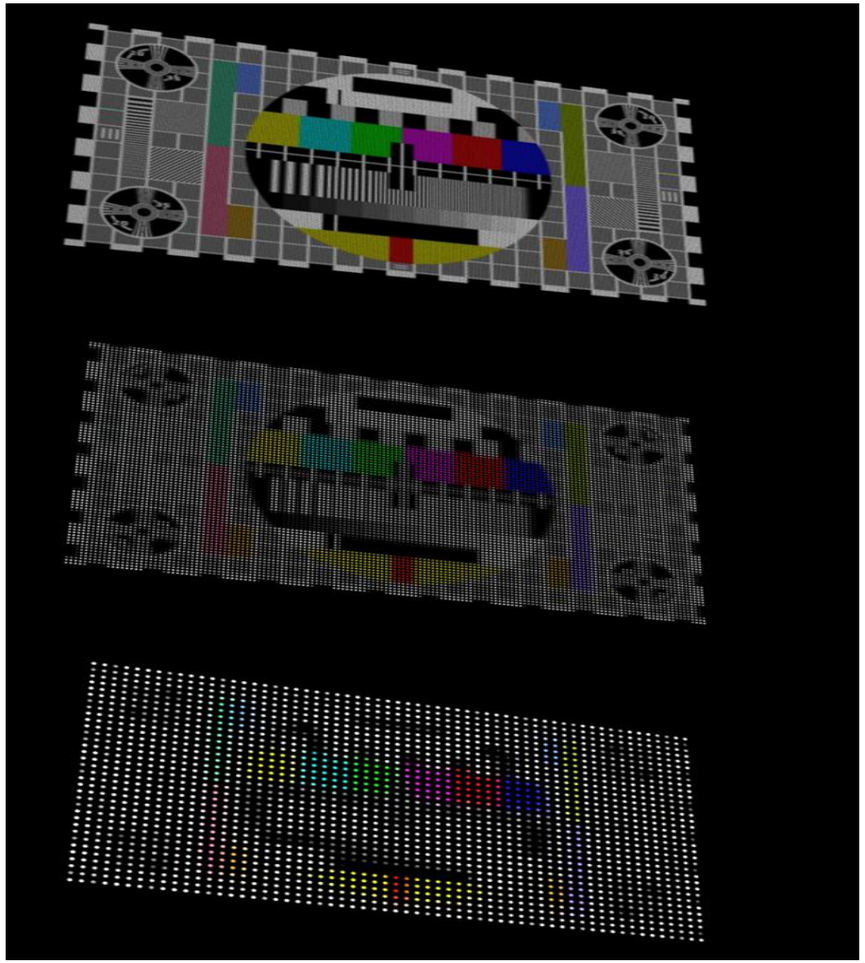


ADDITIONS

Off Grid and PV systems

ADDITIONS

Media facades



ADDITIONS

Building Facades

Heritage to modern + individual features

ADDITIONS

Ecological and environmental issues

ADDITIONS

Equipment for Extreme Environments

ADDITIONS

LEDs

- Not mentioned at all in the 1992 Guide.
- Forms a large part of the Luminaires & Equipment chapter.

And much more

THANK YOU FOR YOUR ATTENTION