



COUCH PERRY & WILKES



Lighting Design Specialists

3D render of meeting room



University of Birmingham LED DMX Lighting





LIGHTING DESIGN SPECIALISTS

CPW is a multi-disciplinary building services consultancy with expertise in all aspects of building services, environmental design & modelling, sustainability and low & zero carbon design and management.

Light is of fundamental importance to many facets of the built environment. This includes the creative element and drama that can encourage or oppose architectural language, the quality component that can stimulate human function & rhythm and the discipline of daylight analysis to minimise the energy consumption of artificial lighting.

As experts in the field of lighting design, product design, application, modelling & analysis and project management during the construction phase, CPW Light can provide a lighting philosophy that tackles all the facets of lighting design for today and the future.



Lighting Application Design

All aspects of lighting design and product selection to realise the lighting philosophy desired. Using all forms of light source and controls. BREEAM and Light pollution.

Project shown: University of Birmingham - Senate Chamber - Illuminated with LEDs and DMX control



Daylight Design & Analysis

With artificial lighting prevailing around 30% of a buildings annual energy costs, daylight is a key target. We simulate complete buildings including inter-reflections and contributions between internal rooms and atria.

Daylight analysis allows us to predict annual energy savings, glazing specifications and artificial lighting strategies.



Photorealistic 3D Visualisation

3D visualisation is a technique to represent a scene before it is constructed.

Many 3D visuals are graphic concepts, however we provide full photometrically correct 3D illuminated scenes based around true lighting products.



DAYLIGHT

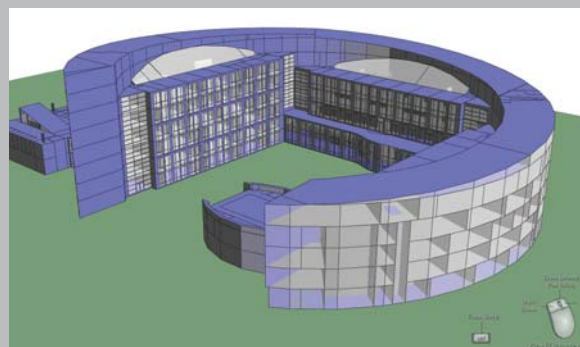
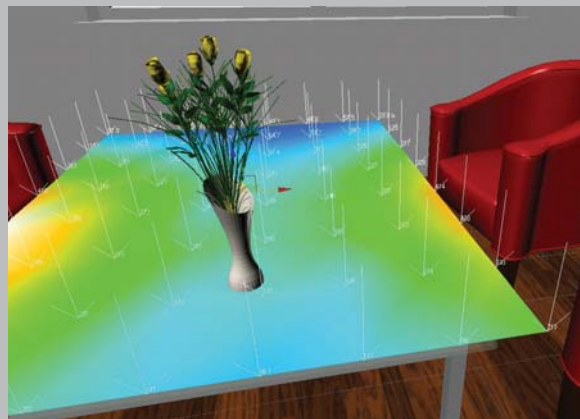
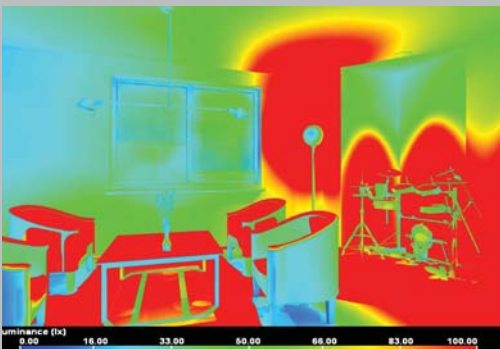
Daylight is an essential element of a modern visually attractive, energy saving and stimulating scene. With a vast amount of daylight available throughout the majority of the working year it is crucial that good daylighting design uses this energy to illuminate our spaces to minimise energy consumption from artificial lighting.

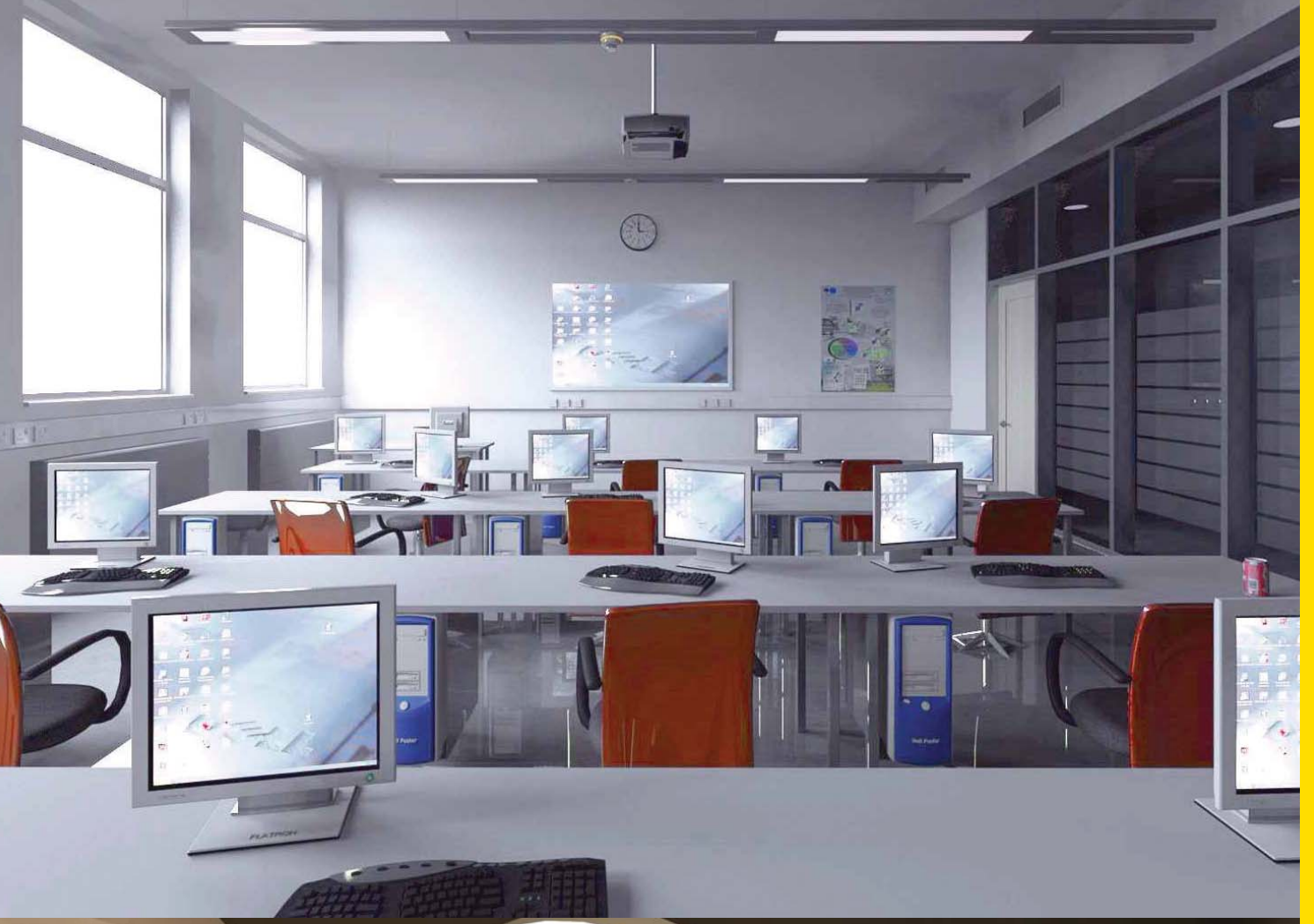
Daylight analysis informs design teams of project performance. For example Daylight Factors are an important aspect of BREEAM schemes.

Daylight analysis allows designers to predict annual energy consumption savings using annual daylight availability profiles. This informs the artificial lighting and dimming strategies.

Therefore the analysis assists in window and solar shading design.

At CPW, we go beyond the minimum requirements to meet basic standards. We believe good daylight benefits humans circadian rhythms and our designs and advice encourage this.





3D daylight visual for educational design



Computer generated daylighting visual of a cloister



3D PHOTOREALISTIC VISUALISATION

A huge advantage of modelling buildings, landscapes and internal spaces is viewing the potential end results and exploring new ideas before any construction work takes place.

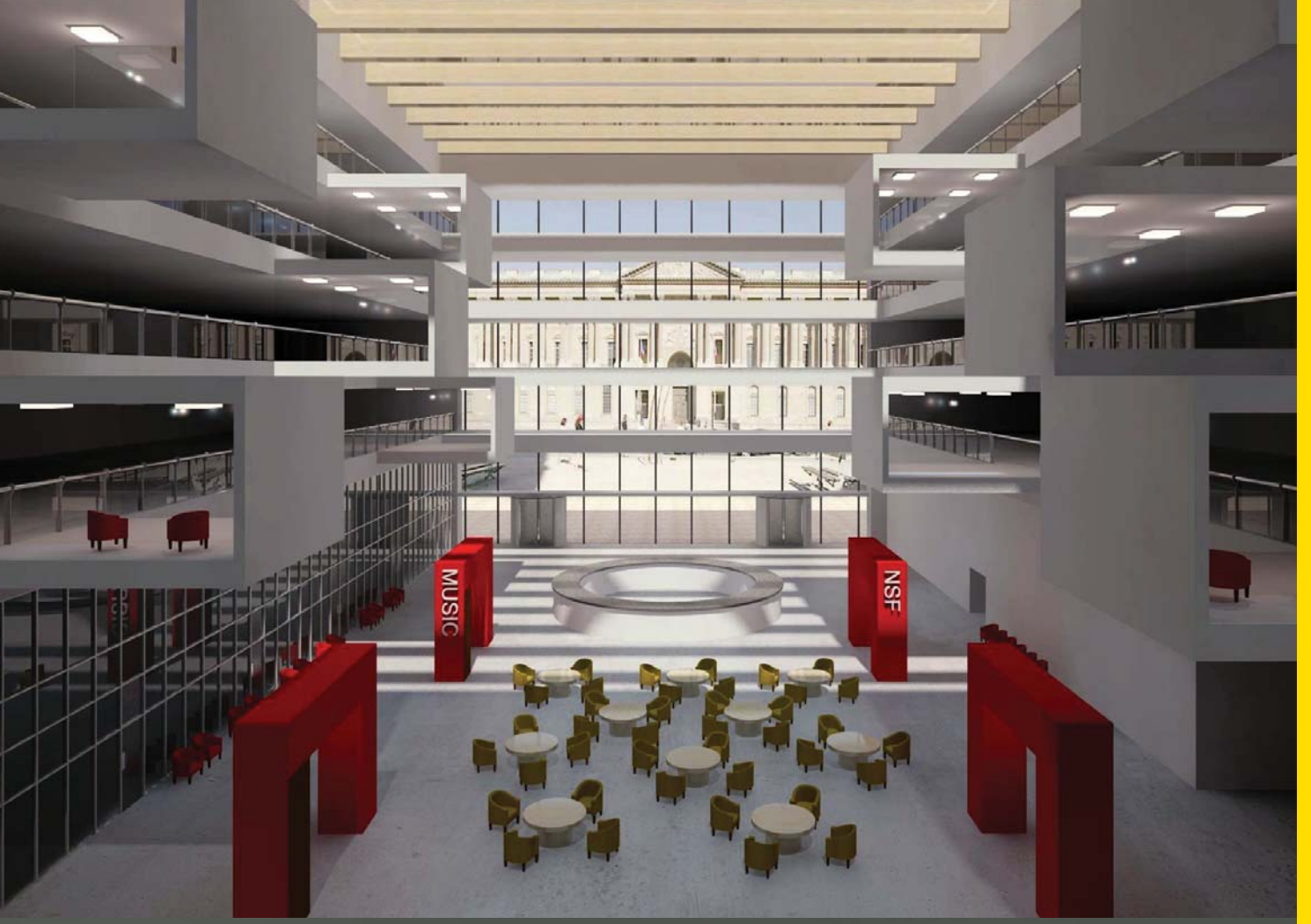
With our combined daylight analysis and modelling we advise on glazing specifications, room design and lighting strategies to optimise energy consumption.

Our 3D visualisations are photometrically accurate based on Eulumdat, IES or TMI4 photometric files and physical properties of luminaires.

Many renders (still images) are produced as concept pictures and can impress clients, however it is important that realistic renders describe the scene as true as possible. If the render does not look appropriate then the modelling has shown a need to review the lighting philosophy instead of modifying the render to look pleasing.

Our 3D visualisations do not have the 'photoshop' treatment.





3D atrium concept



Swimming pool with caustics

CONTACT

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For further information on the full range of services
we offer please visit our main web site:

www.cpwp.com

**Offices in Birmingham, Nottingham,
Cambridge & Leeds**

